UNITED STATES DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
WOMEN'S BUREAU
MARY ANDERSON, Director

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

FISCAL YEAR
ENDED JUNE 30
1930

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1930

For sale by the Superintendent of Documents, Washington, D. C. - - - - - - Price 5 cents

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UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, July 15, 1930.

Hon. JAMES J. DAVIS,
Secretary of Labor.

SIR: The twelfth annual report of the Women's Bureau, for the fiscal year ended June 30, 1930, is submitted herewith.

INTRODUCTION

The past year stands as a milestone in the history of the Women's Bureau, since it marks the end of its first decade as a permanent agency. Despite its small appropriation and limited staff during this period, the bureau can point to a steady development and expansion of activities in the performance of its duty as outlined by Congress, "to formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance their opportunities for profitable employment." Each year, as the bureau has become better known, the demands upon it have steadily increased and the volume and variety of its work have expanded. With the number of women workers constantly growing, with the striking increase in 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 our 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. As would be expected, therefore, the bureau's program during the past year has comprised many diverse achievements of real significance not only to women but to the home, the family, the community, and the Nation.

The main types of activity may be outlined as follows: Administration; field investigation and first-hand collection of information; research studies and activities; tabulation of data; preparation, publication, and circulation of reports; cooperation with State departments of labor; dissemination of facts in popular form, including the planning and construction of exhibit material; participation in conferences in various ways, particularly by means of scientific addresses on special subjects by experts on the bureau staff.

STANDARDS FOR THE EMPLOYMENT OF WOMEN

The standards of hours, wages, and working conditions for women formulated by the bureau soon after its creation have been stressed constantly during its existence. These standards, drawn up after a great deal of consideration and the collection of much information concerning the best practices in the employment of women, are not mandatory but are offered merely as suggestions for employers and workers. Though they are thoroughly practical, reasonable, within reach of all employers, and in force in the most progressive establishments, many thousands of women still are working in plants that have not accepted them, but have conditions far below those advocated as essential for the health and efficiency of women wage earners.

The standards that, according to Women's Bureau policies, 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, are outlined 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 women.

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 the 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.

A DECADE OF WOMEN'S BUREAU ACHIEVEMENTS

The close of the first decade of the bureau as a permanent organization and, incidentally, of its twelfth year as a Government agency seems a fitting time for a brief résumé of its achievements. Except

in a few instances, the studies discussed here have taken place during the past 10 years.

The bureau has conducted many and varied investigations, the reports of most of them having been published and given wide distribution. It has to its credit eighty-odd bulletins that have been of real interest and value to many different groups—to industrialists, business men, and employers from the point of view of dollars and cents and efficient production; to sociologists, psychologists, educators, physicians, and scientists concerned with human welfare, conduct, and relations; to forward-looking women interested in the progress of their sex; and to labor groups striving to gain a higher and firmer foothold on the ladder of industrial progress.

Cooperation with State departments of labor always has constituted an important feature in the bureau's program of activities, since the States in so many instances lack the funds, personnel, and equipment essential for conducting investigations of the type possible for the Women's Bureau.

From November, 1918, to January, 1929, the Women's Bureau made investigations of women in industry in the following 20 States: Alabama, Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Mississippi, Missouri, New Jersey, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, and Virginia. In each case the study was made at the request of forces within the State.

The bureau has conducted also a number of intensive studies of special industries employing large numbers of women, such as candy manufacture, canning (vegetable and fruit), textile mills, 5-and-10-cent stores, laundries, domestic and personal service, meat-packing plants, cigar factories, and the radio industry.

In general, these investigations have revealed that, although many women are employed under satisfactory conditions, large numbers still fail to receive an adequate wage for efficient services and thousands continue to operate on a 10-hour schedule and under working conditions detrimental to health and safety.

According to the United States census, there were in this country in 1920 more than a million women in agricultural pursuits and considerably over two million in domestic and personal service. Each of these two big groups is characterized by a number of difficult employment problems. The Women's Bureau has to its credit several investigations of the hardships and handicaps of women in such types of employment, and has thus made available data of value and importance, stressing the need for considerable improvement in standards. Much in the way of education remains to be done, however, before such ends can be achieved.

Although the lion's share of the bureau's program has been given to women in the producing and distributing trades, this is as it should be, since these workers are involved in such a severe struggle to earn a livelihood and to meet the many demands made upon them. Nevertheless, women in business and the professions, whose progress is so often checked by prejudice and other barriers, have not been neglected, their problems forming the subjects of discussion in several of the bureau's reports. Outstanding studies of this nature deal with women's occupational progress, women in the realm of invention, the

status of women in Government service, and the employment status and opportunities of women doctors. Similar studies of the difficulties attendant upon women in other fields are urgently needed.

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.

Special labor laws for women have called for considerable library research and first-hand investigation by bureau specialists. At least 10 of the Women's Bureau publications cover various phases of this subject. The history of special labor laws, the detailed analyses of the various types, and the effects of such legislation on women constitute the main lines of discussion.

Other problems pertaining especially to wage-earning women that have been the subject of study by the bureau deal with personal facts about women workers compiled from detailed analyses of census data, opportunities for employment and for training for special trades, the family responsibilities of single women and the breadwinning activities of married women, the handicaps and hardships of special classes of women such as negroes and immigrants, industrial home work by women, and lost time and labor turnover of women workers.

Because of the scientific and statistical nature of much of the material in the bureau's reports it has been presented to the public in simpler form in a number of ways. Popular exhibits, such as models, motion pictures, maps, charts, posters, folders, have been prepared and have been circulated by the bureau in every State in the Union and also in a number of foreign countries. The bureau participated in the National Sesquicentennial Exposition at Philadelphia and in the Iberian-American Exposition at Seville, special exhibits made for these occasions having attracted considerable attention and won special awards from the commissions. News stories and special articles of both a popular and a technical nature have played a steady and important part in the educational campaign that the Women's Bureau has considered essential to maintain throughout its existence.

Two conferences on women in industry have been called and conducted by the bureau, the first in 1923 and the second in 1926. The object in each instance was to bring together the women concerned with the industrial and economic problems as related to women workers and to give opportunity for the presentation of facts about women in industry by experts and the discussion of such problems by the delegates. These conferences made possible an interchange of experiences and ideas among employers, workers, and the general

public for the purpose of developing policies for broader opportunity and more profitable employment of women under modern industrial conditions, and for securing by such means the best results for both industry and society. All national women's organizations and all national organizations having a large proportion of women members were asked to send delegates to the two conferences. Employers, industrial and business organizations, and specialists along many lines also participated in response to invitation from the bureau.

Throughout the past 10 years the bureau has made it a policy whenever feasible to comply with requests for its representatives to attend and participate in, as speakers, advisers, and consultants, important conferences and conventions called by other organizations interested in the problems pertaining to women wage earners.

In general, the bureau's program has been exceedingly diversified because of the variety of problems coming within its scope. This agency has won a place in the country different from that of any other agency and has filled a need that was felt for many years before the bureau came into existence and that was at bottom responsible for its creation. The bureau, through its careful and scientific work and its impartial method of investigating, not only has won a reputation for disseminating valuable and reliable information but has gained the confidence of all groups concerned.

CONFERENCES

An important part of the bureau's work each year is participation in conferences, conventions, and other meetings conducted by various types of organizations interested in matters pertaining to wage-earning women, and the past year has been no exception, the bureau being represented at the following conferences:

Institute of Public Affairs, University of Virginia, August, 1929.
International Association of Public Employment Services, Philadelphia, September, 1929.
Motion-Picture Conference, New York, September, 1929.
International Association of Industrial Accident Boards and Commissions, Buffalo, October, 1929.
Industrial Conference, New Jersey State Department of Labor, Trenton, November, 1929.
Legislative Conference of Consumers' League of Ohio, Columbus, January, 1930.
National Negro Labor Conference, Chicago, January, 1930.
Convention of the Young Women's Christian Association, Detroit, April, 1930.
Conference on Women in Industry, Richmond, April, 1930.
Annual meeting of the Association of Governmental Officials in Industry, Louisville, May, 1930.
National Conference of Social Work, Boston, June, 1930.

In addition, special talks were given by members of the staff to a number of organizations, including schools, churches, professional and welfare groups, women's clubs, and labor unions.

ECONOMIC OLD AGE AND WOMEN IN INDUSTRY

Of particular interest at the present time is the subject of the older woman worker, which has been a paramount issue throughout the year and which was discussed by a member of the Women's Bureau

staff at the National Conference of Social Work in June. The following is a résumé of the talk given on that occasion:

Paradoxical as it may sound, many a young woman in search of a job suddenly discovers that she is an old woman. In a report of the National Industrial Conference Board on industrial pensions the statement is made that in a few limited situations the maximum age limit in hiring women is 10 years younger than that for men; furthermore, the firms reporting gave 30 or 35 as the maximum hiring age more commonly for women than for men. A glance at the "help wanted" columns in any newspaper shows the preference for girls of 18 to 21.

Illustrative of the difficulties of women of 25 or so in trying to get through the employment gate were the experiences of a number among the approximately 1,000 women interviewed by bureau agents in a recent study of the effects of technological changes in the cigar industry. The problem of finding work was even more acute for women in their thirties, and for the woman of over 40 forced to seek a job the situation was almost hopeless. Beyond the age of 25 or 30, industrial employment becomes increasingly precarious.

Industry is acting upon the assumption that you can not teach an old dog new tricks, and it has neither used practical tests to demonstrate fitness for simple jobs nor disproved that other qualities compensate for loss of speed. That production automatically decreases upon reaching a certain birthday is an absurd theory, the sooner discarded the better. If a woman of 30 can learn to control an airplane and a woman of 50 to drive an automobile, they certainly may be trusted to watch an automatic weighing machine or to pull the lever that starts and stops a wrapping machine, modern equipment demanding little more than this from the girl who is merely the tender of a machine.

The study of the cigar industry revealed that in the change from hand-making processes to the automatic cigar-making machine the same production rate can be maintained with only half the working force required formerly and thousands of women were thrown out of employment. Many of the women laid off had been unable to secure other jobs in the cigar industry and had been forced to take any kind of work available, often at a considerable wage reduction. Others had failed to find employment of any kind. Both in loss of employment and in loss of wage the older women had suffered more than had the younger ones. For the purpose of this industry, women who had reached the thirtieth birthday had come to be classified as old, and for the woman of over 40 cigar making was practically out of the question.

The following facts deduced from this study give a slight picture of the hardships of the older woman worker:

(1) The wages of women of over 40, after the change of employment, dropped to a lower scale than did the wages of the younger women.

(2) Women of over 40 had more difficulty in finding a new place in industry after a lay-off than had younger women.

(3) Women of over 40 lost more time from unemployment between jobs than did women of under 40.

(4) Almost 40 per cent of those never finding a new job after the lay-off were over 40.

(5) Women of over 40 found office and telephone work closed to them and were less successful in finding jobs in stores, laundries, and other branches of

manufacturing than the cigar industry, and to a greater extent were forced into domestic service.

(6) Women of over 40 were less likely to find steady employment than were women of under 40.

(7) Unsolicited comments by these women showed that they considered age an important factor in finding employment.

PUBLICATIONS

The bulletins issued from the press this year aggregate more than 750 pages, and 166 pages more have been through the various stages of printing but are not ready for release.

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

No. 66. History of Labor Legislation for Women in Three States; Chronological Development of Labor Legislation for Women in the United States.
No. 72. Conditions of Work in Spin Rooms.
No. 73. Variations in Employment Trends of Women and Men.
No. 74. The Immigrant Woman and Her Job.
No. 75. What the Wage-Earning Woman Contributes to Family Support.
No. 76. Women in 5-and-10-cent Stores and Limited-Price Chain Department Stores.
No. 77. A Study of Two Groups of Denver Married Women Applying for Jobs.
No. 79. Industrial Home Work.

Though all these studies have appeared in the form of published bulletins and have been given wide circulation and publicity during the past year, certain ones that were conducted in earlier years and discussed in considerable detail in previous annual reports require only brief summaries at this time, whereas others call for a much fuller statement as to purpose, scope, and findings.

History of labor legislation for women in three States.

This was an entirely new and most interesting type of study, showing the forces at work to bring about the adoption of labor legislation for women. The development of such legislation was studied intensively in three important industrial States—California, Massachusetts, and New York—with the thought that the history in these States would be typical of a large part of the country. Briefly, the report considers how such legislation originated, the forces working for and against it, and the factors that made for its final enactment.

Chronological development of labor legislation for women in the United States.

To complete the survey of the evolution of labor legislation in the United States, the origin and development of all the labor laws for women in all the States were traced from the passage of the first labor law in 1847 to the status on January 1, 1929. No attempt was made to discuss the forces that brought such laws into being, but each step in the development of the present code was recorded, a history characterized by constant struggle and slow gains.

Conditions of work in spin rooms.

This report consists of two parts. The first gives a detailed analysis of the lost-time and labor-turnover records in four mills where a new method of spinning had been introduced in whole or in part, the purpose being to ascertain the attitude and reaction of the women spinners toward the change in method. The second part at-

tempts to disclose to some extent what is being achieved in heat regulation in cotton mills where careful management is anxious to have the work run as well as possible, conditions in seven northern and eight southern mills forming the basis of the study.

What the wage-earning woman contributes to family support.

An article on the wage-earning woman's economic and family responsibilities, written for the Annals of the American Academy of Political and Social Science and containing interesting data from a number of reports on woman's share in family support, was reprinted as a bureau bulletin by permission.

Variations in employment trends of women and men.

The figures presented in this survey show the trends of employment for women and for men in Ohio in 54 industrial or occupational classifications over the 11-year period 1914 to 1924. For each of the classifications curves were drawn that show graphically when and to what extent trends for the two sexes differed or coincided. State employment records constituted the source of the material.

Women in 5-and-10-cent stores and limited-price chain department stores.

Facts on hours and earnings and some personal information were assembled from the bureau bulletins on State surveys for well over 5,000 women in 253 5-and-10 or limited-price chain department stores in 18 States. As a supplement to these data, pay-roll figures for a week in 1928 for about 6,000 women in 179 establishments in 18 States and 5 additional cities were secured by the bureau's agents. Over one-half of the women employed in 1928 were in the same States for which earnings had been reported in the earlier surveys, many identical establishments being included.

The immigrant woman and her job.

To ascertain how and to what extent foreign-born women are fitting into American industrial life, how necessary such employment is for the women and what it means to them and to their families, and how much of their time and strength is given to industry, was the purpose of a survey of immigrant women in Philadelphia and the Lehigh Valley made by the Women's Bureau in 1925. In all, 1,120 women were interviewed in Philadelphia and 1,026 in the Lehigh Valley.

Philadelphia and the Lehigh Valley were chosen for this study as typical cross sections from the standpoint of immigrant workers—Philadelphia a big city with a large proportion of foreign born and with diversified industries, and the Lehigh Valley a locality with a few predominating industries and concentrated groups of foreign-born labor.

The principal groups represented in the Philadelphia study were the Poles, Jews, Italians, and Germans, constituting 26.3 per cent, 19.7 per cent, 15.4 per cent, and 9 per cent, respectively. In the Lehigh Valley, Germans formed the largest proportion, or 34.1 per cent; Magyars came next (22.1 per cent), followed by Slovenes (17.9 per cent) and Slovaks (8.2 per cent).

One-fifth of the women were United States citizens, practically all by action of father or husband. About one-half of the total

number, and not far from two-fifths of those who had been in this country 10 or more years, could not speak English.

In Philadelphia, although the women visited were employed in a miscellaneous array of industries, clothing factories had claimed nearly one-fifth of these workers and the textile trades approximately two-fifths. In the Lehigh Valley the steel and cement industries originally had attracted foreign labor. Then there had moved into this region such important woman-employing industries as cigar and silk manufacturing, with an eye on the women in the immigrant families as a source of cheap and abundant labor supply. Nearly two-thirds of the women visited in this section were in cigar factories and one-third were in textile mills.

In comparatively few instances were these women responsible for their own livelihood only. About three-fourths of the 2,146 were or had been married, and 1,186 were the mothers of 3,083 children, an average of 2.6 per mother. Children under 6, like the older ones, were growing up without proper care and supervision. Arrangements for their care during the mothers' industrial employment varied from the most casual and inadequate to paid service.

Almost all the women had two jobs—one in the home, involving the care of the family and the performance of household duties, and the other outside the home, usually in a factory, engaged in for the purpose of earning a livelihood and contributing to the support of others. In 156 families the woman was the sole wage earner. Only 28 women reported no household duties. One in every eight of the married and widowed women reporting had boarders and lodgers as an additional responsibility and source of revenue.

The short workday was the exception, not the rule. Almost two-thirds of the women who reported their hour schedules worked a day in excess of 9 hours. More women in the Lehigh Valley than in Philadelphia had long hours, the cigar industry being responsible for the longer schedule. Practically two-thirds of the women in this industry who reported their hours worked slightly in excess of 10 hours daily. It was said repeatedly that the men in the Lehigh Valley had an 8-hour day but that scarcely any women in the community enjoyed such practice. Moreover, eagerness for a fuller pay envelope caused some women in cigar factories to work even longer than the plant schedule. The specters of unemployment, part-time work, shutdowns, and lay-offs, which inspired in the women an awful dread, made many of them try to work as much as possible as long as work was available. Reasons were given by 1,371 women for interruptions to their employment in the United States. More than 500 women gave industrial causes as their reasons for losing time.

Information about the amount earned in the week preceding the interview was obtained from 988 Philadelphia women and 836 in the Lehigh Valley. The median for the Philadelphia group was $15.35, one-half earning more and one-half less than this amount; the median for those in the Lehigh Valley was $16.75. In each section about 1 in every 10 women earned less than $10. Only about 18 per cent in Philadelphia, as compared with 29 per cent in the Lehigh Valley, earned $20 or more.

Not only the women's but some of the men's earnings in the families visited came under scrutiny. About one-tenth of the 456

men whose earnings were reported received less than $20 a week and only slightly over one-fourth earned as much as $30.

In connection with this survey, a study was made of foreign-born women engaged in industrial home work in Philadelphia. Two-thirds of the 159 women were Italian. All but three were married, the dependency of children being the principal cause of their engaging in this form of employment. They were occupied in such jobs as finishing clothing and sweaters, sewing carpet rags, carding hooks, snaps, and pins, stringing tags, beading buckles, covering curtain rings and pulls. The median of the week's earnings for 139 women, including the help of children in some cases, was $3.70.

Another group studied in connection with the survey consisted of 732 women attending public night schools. The great majority of these, about 56 per cent, were Jewish; the next largest number, or almost one-fifth, were German. Well over one-half were under 21 years of age, and over nine-tenths were single. Seven-tenths could read and write in more than one language.

In general, not the prospect of a sudden fortune but the opportunity for a better job and "better living" had been responsible for drawing to American shores the aliens included in this survey. But for many the better living had not materialized. Too often the women interviewed were living in a crowded house devoid of all modern conveniences, located perhaps in a blind alley, and bearing the earmarks of distressing poverty. In a number of instances the kitchen answered also for dining room, living room, and bedroom. In the Lehigh Valley it was not uncommon to find two, three, or more families occupying a house built for one, the kitchen serving as a community room where each woman cooked her family's meals on the common stove and where everybody congregated.

The Bureau of Municipal Research in Philadelphia has recommended as a standard for the housing in health and decency of the wage-earner's family of five persons a 6-room house facing a street and containing a bath room, laundry tubs, furnace, and facilities for cooking and lighting with gas. As far as space is concerned, the Women's Bureau study shows for the Lehigh Valley, even when several families living cooperatively in a house of six rooms or more are considered as one household, that one-half of the dwellings visited fell below this standard, and in many cases sanitary facilities were entirely lacking. In Philadelphia more than three-fifths of the dwellings failed to measure up to the requirement as regards space. In the Lehigh Valley 11 houses were encountered with 12, 13, or 15 people occupying six rooms.

To what extent aliens unable to maintain themselves on the level of American standards of living can be expected to conform to American standards along other lines, and what effect such discrepancies have on our national vitality and development, are challenging problems brought out by the survey.

A study of two groups of Denver married women applying for jobs.

Another study made was concerned with the economic responsibilities of two groups of women who were or had been married and who applied for jobs during the spring and summer of 1928, the data comprising employment records for 345 applicants to the Denver

Young Women's Christian Association and 103 applicants to a large department store in the same city.

Over two-thirds of the women stated that they were without a husband's support. In these cases the husband was reported as dead, ill, physically incapacitated, or unemployed, or the wife was separated, divorced, or deserted. In four instances the husband was in prison.

The women with husbands constituted 45.5 per cent of the women reporting on marital status; the separated, deserted, and divorced, 28 per cent; and the widowed, 26.5 per cent. Approximately nine-tenths of all the women and almost three-fourths of those whose husbands contributed to their support stated that they were seeking work because of economic necessity. Such facts show that discrimination against married women workers may cause injustice and hardship.

Of the women whose husbands contributed to their support, a number stated that the husband's earnings were irregular or inadequate for the family needs. A few of these were seeking work so as to help their husbands in financial emergencies, and one had to help in the support of her parents.

More than two-fifths of the women whose source of income was ascertained had none except their own earnings. In some cases contributions from sons or daughters, house or room rent, alimony, or insurance were given as other sources of income.

The presence of young children gave added responsibility to many of these women. Of the applicants to the Young Women's Christian Association, 299 reported on the husband's support. One-half of the 221 women who were without such support had children under 16, nearly one-fifth having two or more children. Less than 40 per cent of the widows, but over 60 per cent of the women whose husbands were divorced, separated, deserting, ill, unemployed, or in prison, had children under 16. In the case of those who received some support from their husbands, 45 per cent had young children.

Of the total number of women applying for jobs to these two agencies during the period studied, those who were or had been married constituted about one-third, and jobs were secured by only 36 per cent of these. How the rest of them, whether married, widowed, separated, or divorced, met the economic problems that drove them to ask for work was unanswerable from the agencies' records.

This study is an illustration of the type of investigation that could be made with profit by agencies in other communities, often with comparatively little change in the kind of record ordinarily kept for their own purposes. When such data are secured in a number of communities, a valuable contribution will be made toward the building up of a body of knowledge as to the reasons why married women seek employment and toward the answering of this social question with a certitude beyond the realm of speculation.

Industrial home work.

Industrial home work, resulting from the custom of sending articles from factories into homes to be made or finished, is a condition that prevails to a much wider extent than is generally realized. It is a problem on which little light has been thrown, and information as to the extent and character of home work is fragmentary.

Consequently the Women's Bureau felt the need of calling more attention to the subject in a special report, in view of the irregular method of production, the large numbers of employers of an unstable and shifting character, and the equally unstable group of workers scattered about in tenement houses—conditions that are characteristic of the industrial home-work system.

The bulletin contains a discussion of the evils of the system, such as long hours, low rates of pay, irregular employment, child labor, and working conditions that constitute a menace, actual or potential, to the health of the workers and of the public. There are included also a digest of certain studies and State reports, a list of references available, and the recommendations drawn up by a committee appointed in February, 1926, by the Association of Governmental Labor Officials of the United States and Canada to look into the character and extent of this system of labor and the methods of regulating it in the various States. These recommendations stress the need of continued study of the problem by the association and its membership in the various States as well as by independent research organizations.

Industrial home-work industries, the bulletin states, are those of seasonal and very irregular employment or subject to fluctuations with changes in fashion or process. The system is a means by which employers are enabled to secure rapid expansion and contraction of the working force without providing overhead and without assuming the full responsibility for a stable group of workers.

The needle trades make extensive use of such methods. Of the 21,573 home workers found in licensed houses in New York State in the year ended June 30, 1927, the clothing trades employed over 13,000, and embroidery and artificial flowers gave employment to 4,000 more. Stringing tags; carding buttons, hooks and eyes, or safety pins; making garters; knitting; and work on tobacco products, cheap jewelry, lamp shades, powder puffs, paper boxes and bags, carpet rags, and toys—all are industries carried on to some extent by numerous home-work employers, most of whom operate in a rather small way with few factory employees.

The work itself usually is of a simple nature easily accomplished by women with little industrial experience and driven by the pressure of family needs to seek employment. Because of the handicaps of inexperience, home responsibilities, physical disabilities, language, or custom, these workers are but poor bargainers in the labor market, and low wages, unregulated hours, poor working conditions, and child labor are too commonly associated with factory work done in the home.

The victims of the neglect of proper regulation of this system are not limited to the home workers themselves. That products coming from unclean or diseased homes become a menace to public health is emphasized in the bulletin. Although recent studies quoted in this report have found the majority of homes visited to be clean and in fairly good condition, there are always some encountered that show evidences of filth and others where work has continued in the presence of communicable disease. For example, investigations in New Jersey and Pennsylvania disclosed articles being made in homes where diseases such as measles, whooping cough, scarlet fever, influenza, tuberculosis, syphilis, and gonorrhea were present.

COMPLETED STUDIES NOT YET PUBLISHED

A survey of laundries and their women workers in 23 cities. (In press.)

The laundry industry has shown tremendous growth and change in character during recent years as a result of the use of power machines and the development of the system of rough-dry and finished family services. Also, changes in living conditions have been conducive to the shifting of laundry activities from the home to the industrial establishments. Another outstanding feature in the industry is its development from haphazard and individualistic methods to scientific, efficient, group operation. Accordingly, the laundry industry, though not so old as many others, is rapidly becoming one of the major woman-employing industries of the country.

In view of all these factors, the Women's Bureau decided that a survey of conditions under which women were employed in laundries would be of significance and a contribution to all interested in the welfare of wage-earning women. Such a survey was undertaken, the field work lasting from September, 1927, to May, 1928.

The survey covered 290 laundries in 23 cities situated in 17 States and included 19,758 women, who comprised a little over four-fifths of the total number of employees in these plants. Negroes constituted a little over one-fourth of the women employed. Information concerning the laundry practices was obtained through the cooperation of owners and the assistance of their national and local organizations. Plant managers reported scheduled hours in the laundries and turned over their current pay rolls to the bureau's agents so that the necessary data on week's earnings and, wherever possible, hours worked might be recorded.

In the individual plants inspection of working conditions was made. Such characteristic problems of the industry as heat and humidity, lack of safety precautions in the way of guarded machinery and equipment, as well as strain on women workers resulting from the use of foot treadles and old-fashioned body ironers, were carefully gone into. The composition of the working force, including such facts as nativity, age, marital status, and length of service, was investigated. An effort was made through home interviews to learn of the advantages and drawbacks in laundry work from the viewpoint of the employees, chiefly through comparison with other jobs held by these women and their reasons for changing from one type of employment to another.

Over four-fifths of all the women reporting on nativity were American born. As regards age, a larger proportion of women were 40 years or more than were under 20. Women who were or had been married constituted about two-thirds of the white and over seven-tenths of the negro women. About one-half of the white women and nearly two-fifths of the negroes had worked in the industry off and on for five years or more. One-third of the white and one-fifth of the negro women had worked in laundries only. Of the women expressing a preference for laundry work to that in other industries, 30 per cent gave "better hours" and nearly 27 per cent "better pay" as the reason for such preference.

About three-tenths of the women in this survey had daily hours of 8 or under, and only 8.8 per cent worked as much as 10 hours a day. Not far from half of them had a weekly schedule of 48 hours or less. Laundries in the western States had decidedly shorter hours, on the whole, than had those in other sections, and they were largely responsible for the good hour record described, since 97.2 per cent of the women had the 8-hour day and a week of 48 hours or under. As a contrast was the situation in the southern States visited, where hours were the longest, 82 per cent of the women working a day of over 9 and including 10 hours, and 48.4 per cent having a weekly schedule of 54 hours and over. The full scheduled hours of the plant were worked by 50 per cent of the white and 29 per cent of the negro women in the survey. Overtime was reported for 10.2 per cent of the white women and 18.9 per cent of the negroes; it was found to be greatest in the southern States.

The week's earnings of the white women had a median of $16.10, the median for the negro women being considerably less, $8.85. For the white women who worked full time the median was $17.80; that for the negro full-time workers was $10.25. Nearly two-fifths of the white women and over nine-tenths of the negroes earned less than $15, and less than one-fifth of the white, as contrasted with 1 per cent of the negro women, earned $20 or over. Wages were considerably higher in the western States than in other sections of the country.

In regard to wages in the chief occupations both the white and the negro women engaged in marking and sorting received the highest pay of any of the chief occupational groups, the medians being $17.35 and $11.90, respectively, for the two races. By far the largest proportions of both white and negro women were engaged in flat work, with medians of $14.55 and $8.65, respectively. For the white women this was the lowest-paid occupational group; for the negroes it was the next to the lowest.

Working conditions varied greatly from plant to plant. In the temperature readings, taken by means of a sling psychrometer, one-fourth of the dry-bulb readings were 80° and over. Of these dry-bulb readings of 80° and over one-half had wet-bulb readings of 70° and over, and a little more than one-fifth had a relative humidity of 60 per cent or more. Nearly half of the readings were reported by the investigators as being "comfortable," and about the same proportion as being "warm" or "hot."

One-third of the laundries visited had no artificial ventilation. Hoods with exhausts over all flat-work ironers were found in only 11 per cent of the plants reported upon for this item. Seven laundries of the 290 had flat-work ironers without guards, 92 had extractors without guards, and 44 had no guards on their presses. The foot treadle was found on some presses in 166 laundries, and the old-fashioned body ironer was used in a small number of plants.

Women in Florida industries. (In press.)

Upon the request of the Governor of the State and the League of Women Voters, the Women's Bureau in the autumn of 1928 conducted a state-wide survey of the hours, wages, and working conditions of women in industry in Florida. The bureau has made it a

policy to cooperate in this way with States, upon request, in view of the fact that most of them lack the funds, personnel, and equipment for making such surveys for themselves. Florida is the twentieth State investigated by the bureau during the 12 years of its existence.

From the viewpoint of women workers this survey is of unusual significance, because, although Florida is not a large industrial State, it has grown greatly in industrial importance in recent years. Also, much of its industry and business inevitably is of a seasonal nature because of the tourist trade during a few months of the year—a condition that adds to the problems of women workers engaged so largely in occupations characterized by irregularity of employment. One in every seven white women and about two in every five negro women in the State were gainfully employed, according to the 1920 census. With 46.4 per cent of its wage-earning women in domestic and personal service, Florida showed, of all the States, the largest proportion so occupied, a situation due without doubt to the tourist trade.

The survey covered 5,956 white and 1,888 negro women employed in 163 representative establishments—factories, stores, hotels, restaurants, and laundries. Investigation of plants revealed that working conditions, such as lighting, heating, safety precautions, and sanitary and service facilities, were fairly satisfactory in the majority of the plants reporting. However, such menaces to health and safety as lack of seats or the wrong type of seats, slippery floors, the common cup and common towel, toilets that were insanitary or insufficient in number, inadequate lunch rooms, cloak rooms, rest rooms, and first-aid equipment were encountered in a sufficient number of cases to call for a campaign of improvement.

That a movement also is needed to shorten hours for women is apparent from the data. Only 16.3 per cent of the white women and none of the negro women in factories, stores, and laundries had a day of eight hours or less. A schedule of 10 hours or more was reported for 15.3 per cent of the white and 69.1 per cent of the negro women. A weekly schedule of 48 hours or less was found in just eight firms, employing only 4.1 per cent of the white women and 5.1 per cent of the negroes.

The median of the week's earnings of white women in these establishments was $15; that of the negroes, $6.65. The full-time workers had medians of $15.60 for the white and $7.60 for the negro women. The general mercantile industry was found to have much the highest median for white women—$18.10.

In regard to hotels and restaurants, a daily schedule of eight hours or less was quite general, but a 7-day week was reported for more than nine-tenths of the women and a weekly schedule of 60 hours or more for nearly one-fifth. The occupation with the largest proportion of both white and negro women having long hours was kitchen work. This occupation had the highest median of weekly rates, $15.90 for the whites and $10.65 for the negroes, irrespective of meals, lodging, or tips. The lowest median for the white women was $5.75 for waitresses and counter girls; the lowest for the negroes was $8 for maids. Where neither room nor meals were furnished, the medians were $12.35 for the whites and $8.80 for the negroes. Where room and meals were given, the medians were $5.50 and $5.65 for whites and negroes, respectively.

Earnings of women in 13 States.

In view of the vital importance of and great interest displayed in the subject of women's wages, the data on women's earnings compiled by the bureau in its various State studies have been assembled in one report. The material covers the earnings of 100,967 white women and 6,120 negro women working in 1,472 factories, stores, and laundries in 13 States—Alabama, Arkansas, Delaware, Georgia, Kentucky, Mississippi, Missouri, New Jersey, Ohio, Oklahoma, Rhode Island, South Carolina, and Tennessee—studied chiefly in the period from the fall of 1920 to the early months of 1925. To make the data more comparable, wage figures in certain instances have been translated into 1928 values through the use of the cost-of-living index of the United States Bureau of Labor Statistics. In general, the report contains many valuable correlations and analyses, such as earnings in the various industries; earnings of full-time, undertime, and overtime workers; earnings and hours worked; earnings for timework and piecework; earnings and rates; earnings according to age, experience, and nativity.

Of the women included, 79,162 white and 3,141 negro women were in manufacturing industries, the remainder being in stores and laundries. Earnings of women in manufacturing—and especially in certain of the important woman-employing industries that make extensive use of the piecework system—were found to be very irregular, more so than those in general mercantile establishments. The median earnings of women in the latter were higher than those in manufacturing in all but 3 of the States included, whereas the medians in manufacturing were above those in laundries in 9 States, and those in laundries above those in 5-and-10-cent stores in 11 States.

The medians of the week's earnings—one-half of the women reported earning more, one-half less—of white women in the manufacturing industries ranged from $19.13 in Rhode Island in 1920 to $8.35 in Mississippi in 1924. Earnings in manufacturing were found to be highest in Rhode Island, New Jersey, and Ohio; lowest in Mississippi, Alabama, and South Carolina; and this is true of the figures both at the time of the original study and as translated into 1928 terms. Factories manufacturing electrical appliances and rubber had the highest wages, plants producing metal products, cigars, and shoes ranking next, these making a more favorable showing in regard to wages than did the other industries included. Medians were universally low in cotton manufactures and, with one exception, in hosiery and knit goods. In general mercantile the highest median was $17.46 for Oklahoma in 1924, the lowest $11.54 for Kentucky in 1921. Laundries had their highest median, $12.84, in New Jersey in 1922, and their lowest, $8.93, in Tennessee in 1925. For 5-and-10-cent stores, Rhode Island took the lead with a median of $11.92 in 1920, and Alabama dropped to last place with a median of $8.07 in 1922.

In manufacturing, the proportion of full-time workers ranged from 25.8 to 54.7 per cent, naturally tending to be greater in States surveyed in normal periods than in those studied in times of depression. With the exception of one State, the medians of the earnings of full-time workers were from 9.5 to 26.7 per cent above those of all workers. In the various States from 43.8 to 62.8 per cent of the

women worked undertime, and in 8 of the 13 States the proportion of undertime workers exceeded that of the full-time women employees. The proportions of overtime workers ranged from 0.4 to 22.1 per cent.

An analysis of earnings by hours worked for 29,030 women in 9 industrially important States showed that higher earnings were received more frequently where reasonably short hours prevailed and that excessively long hour schedules usually were accompanied by low pay. In regard to the chief manufacturing industries, women in metal, electrical appliances, and rubber factories generally had shorter hours and better pay than had the women in cigar plants; cigar workers ordinarily had shorter hours and better pay than had those in cotton mills and in most cases better than the women in hosiery and knit-goods mills. General mercantile, in which shorter hours prevailed more generally than in manufacturing, showed for most States a larger proportion of women receiving $15 or more.

The proportions of the women reported who earned less than their rates were much the greatest in manufacturing, were next high in laundries, and were lowest in stores, general mercantile being considerably better than 5-and-10-cent stores in this respect. In manufacturing, earnings in many cases were considerably below rates, and in general mercantile establishments the custom of paying a sales bonus frequently raised earnings above rates.

The proportions of women reported as on the piece system in manufacturing industries ranged from 16.7 to 82.1 per cent, being over 50 per cent in 10 States and over 75 per cent in 4 of these. The data show that this system was markedly predominant in the great woman-employing industries, and indications are that this is one potent cause of the irregularity of women's earnings. About 90 per cent of the women reported in cigar making, over 80 per cent of those in hosiery and knit-goods mills, about 70 per cent of those in the cotton and rubber industries, and over 50 per cent of those in shoe factories were on piecework. In 12 States the median for pieceworkers was above and the median for timeworkers was below that for all women reported in the State.

In every State nearly half, if not more than half, of the women in manufacturing who reported on age were under 25. The highest median of the week's earnings was for the group of women who were 30 and under 40 in six States, for those of 25 and under 30 in four States. In each age group the proportions of women who earned $15 or over for the week showed a slight decline after the age of 30 and a marked decline after 40. In 5-and-10-cent stores the age at which the median earnings were highest was 20 and under 25 in all but three States, in laundries it was 20 and under 25 in three and 25 and under 30 in three, and in general mercantile it was 30 and under 40 in five and 40 and under 50 in six States.

In each of four States more than 20 per cent of all the women reported had been in the trade 10 years or longer, and in each of seven additional States from about 10 to about 20 per cent had been in the trade that length of time. The proportions of all the women reported who had earnings of $15 or over showed an increase with added years of experience until the period of 10 and under 15 years was reached, after which they declined. The length of experience

required to reach the highest earnings ordinarily was considerable in general mercantile establishments, was less in laundries, and was still less in 5-and-10-cent stores.

Almost every industrial worker suffers considerable variation in earnings during the year, yet she must live for 52 weeks whether or not she receives wages each week. Year's earnings were taken for a representative proportion of the steadier employees, those who had worked in at least 44 weeks of the year preceding the study. In every State but two the highest median of the year's earnings of white women was that for general mercantile, and in every State but one the lowest was that for 5-and-10-cent stores. The median in manufacturing was above that in laundries in 7 of 11 States. In manufacturing, the medians for the various States ranged from $400 to $915; in general mercantile, from $689 to $1,085; in laundries, from $463 to $758; and in 5-and-10-cent stores, from $431 to $667.

Negro women in general had much lower earnings than had white women. The negroes were found almost entirely in laundries and in manufacturing—cigar and tobacco factories employing about two-thirds of those in manufactures. In six States larger proportions of the women in laundries than in manufacturing received earnings as low as $8 for the week reported upon. In every case but one a larger proportion of the women in laundries than of those in manufacturing had worked full time.

Industrial accidents.

Industrial accidents in the United States every year levy an appalling toll on wage earners and on industry. Women workers, while not subjected to many of the most serious industrial hazards, do suffer from accidental injuries and from occupational diseases as a result of their employment in industry. In view of the fact that most published reports about accidents fail to give the sex of the injured, the Women's Bureau decided that it would be of value to discuss this whole matter in a special bulletin with a compilation of data from State reports and with emphasis laid on the importance of separate accident statistics for men and women.

The Women's Bureau bulletin contains an analysis of State accident reports that show data by sex from 1920 to 1927, gives important facts about the number and character of accidents to women, and, in addition, shows that the State reports that give industrial accidents to men and to women separately are, except in very few cases, insufficient and unstandardized.

Only 21 States during the period studied published any accident figures by sex, and only 7 of these published a series throughout the eight years. Moreover, the data when given by sex were incompletely analyzed and lacked uniformity. Only 11 States classified the accidents by age, 11 by extent of disability, 7 by industry, 5 by cause; only 2 gave a frequency rate. Even the bulletins that reported the same type of data were not uniform, because of the lack of standardization in such classifications as age, cause, and industry. New York was the only State that published a report containing data on all the important classifications, and this complete study was for one year only. Very few reports analyzed the facts through correlation of sex with other important factors.

Differences in the compensation laws as to what constitutes an accident, what employments shall be covered, and how much time must elapse before the injured person becomes eligible for compensation, as well as differences in the administration of the laws, make comparison of statistics difficult. Such difficulties in comparing accident data emphasize the need for more statistics compiled and analyzed in the standard form recommended by the International Association of Industrial Accident Boards and Commissions, to give an adequate basis for the work of accident prevention.

Analysis of data in the Women's Bureau study, however, revealed certain significant facts. Accidents to women were actually and relatively fewer than those to men. Women constituted a smaller proportion of the total number injured than of the total number gainfully occupied. Nevertheless, the numbers of women injured were large. For example, in New York State as many as 7,000 women were compensated for industrial accidents in one year.

The proportion of injuries to women usually was higher where women were a substantial proportion of all persons gainfully occupied and where a large proportion of the women were employed in manufacturing. A much larger proportion of the women injured than of the men were under 21 years of age.

In regard to the results of the accidents, the injured women had relatively fewer fatalities than had the men, and the two sexes had about the same proportions of permanent total disabilities, but in three States women had larger percentages of permanent partial disabilities, the figures being, respectively, 9.1, 5.1, and 9.4 per cent for women as compared to 6.2, 4.4, and 9.2 per cent for men. In two other States such disabilities constituted as much as 15.5 and 19.8 per cent of the total injuries to women, the percentages for men in these two being 19 and 23.5, respectively.

In the four States showing extent of disability correlated with age, the records reveal that many of these dismemberments, disfigurements, and injuries causing loss of use of a member occurred to workers under 21. Reports from New York and Illinois showed an average period of disability somewhat less for women injured than for men.

In five of the six States reporting industry classifications for men and women according to the standard form, more than one-half of the injuries to women were in manufacturing. Trade and the group classification hotels, restaurants, and care of buildings also accounted for many accidents to women. Food, clothing, textiles, metals, and machinery and vehicles were chief among the manufacturing industries causing such accidents. Machinery was the chief cause of accidents in three of the five States reporting, and falls of persons and handling of objects also were very important causes. For men, the handling of objects and, though generally to a much less extent, falls usually caused more accidents than did machinery. Machines were responsible for more accidents relatively, and falls for fewer accidents, to boys and girls than to men and women. In the three States reporting cause of accident and age of men and women, machine accidents constituted approximately one-half of all accidents to women under 21 years of age. In the case of New York, sewing machines, power presses, and food-products machines were the chief types of machines injuring women.

Report on prevailing wage standards of some countries that are members of the Pan-Pacific Union.

Recognizing that the problem of improving the status of employed women is world-wide in its scope, the Women's Bureau has been cooperating with women of other countries to secure better conditions for working women. At the first conference of Pan-Pacific women, held under the auspices of the Pan-Pacific Union in Honolulu in 1928, the Director of the Women's Bureau was appointed project director for a study of the wages of women in Pan-Pacific countries.

The bureau assembled facts about the number of women employed, their wages, and their hours of work in Australia, Canada, China, Hawaii, Japan, New Zealand, the Philippine Islands, and the United States. These facts will be reported to the second Pan-Pacific conference in Honolulu in August, 1930, and will be discussed in connection with a report on the cost of living in Pan-Pacific countries.

While it is impossible to make significant comparisons among the wage rates of the women in these countries without information on costs and standards of living, certain comparisons and contrasts are valid. The percentage of all women who were gainfully employed ranged from 15.2 in Canada in 1921 to 31 in Japan in 1920 and 13 in the Philippine Islands in 1926. The figure for China was not available. The 1920 census in the United States showed 21.1 per cent of the women in this country in gainful occupations. The proportion of employed women who were engaged in manufacturing industries varied from 7.4 per cent in Hawaii (1920) to 25.6 per cent in Australia (1921). This information was not obtainable for the Philippine Islands. In the United States in 1920, 22.6 per cent of the total number of wage-earning women were in manufacturing industries. In every country except Hawaii and the Philippine Islands clothing factories and textile mills were the largest woman-employing manufacturing industries. The food industries employed more women in Hawaii than did any other industry group, and the cigar and cigarette industries took the lead in this respect in the Philippines.

The Women's Bureau report recommends: First, that the committee consider what action the Pan-Pacific conference can take to raise the level of women's wages and to improve the character of wage data in the member countries; second, that since the experience of the past two years indicates that a study conducted by questionnaire is not satisfactory, other and more definite plans should be made for whatever project is undertaken.

Hours, wages, and living conditions of Young Women's Christian Association employees.

The bureau has cooperated with the National Young Women's Christian Association in a study of the hours, wages, living conditions, and personal history of employees doing domestic work in the association's centers and branches throughout the country. A great many schedules from all sections of the United States were received, from which the bureau tabulated the data and submitted to the association a series of comprehensive tables to aid in the preparation of its report. Findings were published in the Woman's Press of April, 1930, and will not be presented in report form by the bureau.

The questionnaire was answered in all or in part by 255 associations in 215 cities and towns in 43 States and the District of Columbia. In addition, the national board furnished information on those employed at the headquarters building and in the summer camps. The total number of employees dealt with was 3,252, comprising 1,889 white women, 637 negro women, 410 white men, and 316 negro men.

The study does not claim to cover the whole field nor even to present a carefully selected sample of local units, although there is enough material to give a valuable partial picture. The occupations listed are carried on by a specialized group that works under rather unusual conditions, and the study is not exactly comparable to any other.

Only three girls under 16 were found among the 1,998 women reporting on age. The largest number of white women—about one-fourth—were found to be 40 and under 50 years, while one-fifth were in the 30-and-under-40-year group. On the whole, the ages of the negro women were lower than those of the white women. Of the women reporting on the subject, not far from one-half of the white and over one-half of the negro women had at least one dependent.

The most outstanding fact with regard to hours is that a very large number of the employees were reported as not working a full day or a full week. In general, part-time workers constituted an important part of the work force. Eighty-eight of the 255 units reported that some of the part-time workers were students. Of the white women 33.4 per cent and of the negro women 29 per cent had less than an 8-hour day.

Among dining-room employees, 17.3 per cent of the negro women and 13.1 per cent of the white women worked more than an 8-hour day. Kitchen employees showed higher proportions on such a schedule, 28.3 per cent and 17.5 per cent of the negro and white women, respectively. It was found that only 7 per cent of all the white women and 5 per cent of the negroes worked more than a 10-hour day.

For full-time women workers who received no meals, the highest median of the week's earnings of white women in any State was $17.35 for California; the lowest was $14.15 for Pennsylvania. The highest for the negro women was $17.70 for New York and the lowest was $13.60 for Pennsylvania. The highest median in any State for the full-time white women who received some meals in connection with their job was $15.90 for California; the lowest was $8.40 for Louisiana. The negro full-time women receiving some meals had their highest median in New York, $17, and their lowest in South Carolina, $5.85.

It was found to be more customary for these women to receive meals as part of their compensation than not to do so. Where comparisons are possible, in six States, the median earnings of full-time white women receiving no meals were from $0.55 (in Ohio) to $3.30 (in New Jersey) higher than the median earnings of women receiving meals. For negro women in the three States furnishing such comparisons the differences in medians for the two groups were $1.45 (Ohio), $0.70 (New York), and $0.10 (Pennsylvania).

In regard to occupations, kitchen work paid more than did dining-room work, probably because women employed as waitresses were

expected to receive tips. In all the States where the data permit of comparison the full-time median for kitchen work was higher than the corresponding median for dining-room work. The highest median in any State for the white women receiving meals on full-time dining-room work was $15.65, as against $18.10 for kitchen workers. A similar comparison for the negro women is not possible because the great majority were found in kitchen work, the dining-room workers being too few for the computation of a median in every State but one, where the median of the kitchen workers exceeded that of the dining-room employees.

It is of interest to point out that in 6 of the 11 States where comparisons are possible negro women employees showed higher medians for full-time work with some meals included than did the white women, and in another State the medians were the same. This would indicate that negro women have here an unusual opportunity and are not discriminated against in this field as they are in many others.

A comparison of wage data from this study with data for women in industry collected by the Women's Bureau in various States makes it appear that with few exceptions the wages paid by the Young Women's Christian Association to its women employees in the occupations included were lower than wages paid in the same States to the women in industry covered by the bureau surveys. It is impossible with the material at hand to decide what compensation for this is found in the fact that meals or lodging may accompany the money wage given by the Young Women's Christian Association. However, since the wage levels in the industries generally are low, the wages paid by the association would in many instances seem inadequate.

STUDIES IN PROGRESS

Women workers in the meat-packing industry.

Upon request from a volunteer committee of the National Conference of Social Work that an investigation of conditions among employees in packing houses be undertaken, the Women's Bureau, following its policy of cooperation with agencies interested in the economic status of workers, planned for such a survey. The field work was begun in June, 1928, and continued until February, 1929.

The study appeared of especial value in view of the fact that the numbers of women so employed showed a material increase during the last census decade for which figures are obtainable. According to the census of occupations, the number of women laborers and semiskilled workers in slaughtering and meat packing more than trebled from 1910 to 1920. In the latter year 12,197 such employees were reported, forming more than 10 per cent of all those recorded in the industry. Census figures as to the number of women so engaged since 1920 are not available.

In five States the number of women covered by the bureau's survey included over three-fourths of those reported in the 1920 census, and in three other States it included over half of the census number. The study comprises 6,568 women workers in 34 meat-packing plants in 13 cities and towns in 9 States.

The working conditions in the establishments were carefully noted by the bureau's agents and recorded in considerable detail on special

schedules. The plant record of each woman for a particular week was copied from the pay rolls. The material related to the earnings and hours of 5,101 women, and the period taken was a week in late May or early June, 1928, effort being made to avoid the week with the holiday on the 30th of May.

In every locality studied annual records were taken from the pay rolls for a picked group of steady workers—those who had worked in 44 or more weeks during the year; the number of these women was 2,003. In three cities in Iowa and Minnesota annual data were secured for all women who had been employed at any time during the year, whether for 1 week or 52, including the record of their layoffs and other separations from the plant within the year as well as their earnings and hours worked. These data were secured for 1,904 women and they are especially significant for the valuable information they contain on employment fluctuations in meat packing. Annual records were based on the year from the first week in June, 1927, to the end of May, 1928.

In addition, employment records of the firm were consulted to ascertain the personal history of those women who had been employed at some time in the year—their nativity, race, time in the United States if foreign born, age, and marital status.

Consideration was given to certain features especially characteristic of the industry, such as the extent of the operation of the 40-hour guaranteed-pay plan upon the women studied and the effect on their earnings of the incentive systems in use.

Data on time worked and earnings were gathered for 357 men related to the women studied, to form a further basis for ascertaining the economic conditions of the families and the effects of unemployment of their male members.

Finally, visits were made to the homes of 897 of the women for whom information had been secured in the plants, in order to obtain a fairly complete picture of the workers' family responsibilities, general economic status, and industrial history, including past jobs, periods of unemployment, and irregularity of work. Opportunity was afforded by these visits for comments on the occupations engaged in at the time and the reasons for working. The information secured in this way also included data on kind of home, assistance in household duties, wage earners and non wage earners in the family, steadiness of employment of wage earners, extent to which women were the sole support of the family, earnings of these women, and size of their families; and reasons for working and proportion of total family income contributed by women who were not the sole support of the family. The period for which the home-visit schedules were filled was from July, 1928, to January, 1929.

Hawaiian pineapple canneries.

The canning industry is one in which the Women's Bureau is interested because of the irregularity of employment and of hours for women workers, due to the seasonal nature of the work and the perishability of the product. The Hawaiian establishments offered an excellent opportunity for the bureau to make a study of women working in canneries that were models of modern equipment; that were operated more or less continuously throughout the year, with the greatest peak in the summer; and that had the additional

interesting feature of being located off the mainland of the United States. This survey of women's hours, wages, and working conditions included three plants in the city of Honolulu and four on the island of Maui. With courteous cooperation, the canners furnished data on the wages of about 4,500 women employed during the peak period in the summer of 1928. Data also were collected on seasonal fluctuations in the number of days of operating, month to month, as well as in numbers employed. The details reveal not only seasonal changes but irregularity of hours from day to day and in some canneries the extent of overtime. Material illustrative of racial distribution, age, and schooling of the employees was compiled. In addition, special attention was paid to the good working conditions found almost universally in the canneries visited.

Although the data have been tabulated, the report on the investigation is not sufficiently far advanced to make a detailed discussion of findings possible or advisable at this time. It is of interest to point out, however, that in Honolulu the median of the weekly earnings was found to be $9.90, and that the median of the monthly earnings reported for Maui was $20.75.

Conditions of women in the cigar and cigarette industry.

To ascertain the effects upon women's employment of the recent installation of the automatic cigar-making machine and other technological changes in the manufacture of cigars and cigarettes was the purpose of a study conducted during the past year. One hundred and eight plants in 11 States were visited, employing approximately 26,000 women. Data on the status of employment were obtained from establishments still operating on the old hand method of manufacture, from some in which the modern machinery had been installed, and from others in the process of transition where cigars were made both by hand and by machine. Data also were obtained on the scheduled hours and earnings of women in the plants visited.

Valuable information was secured from visits to the homes of 1,152 women in eight States who had been affected by the technological changes in the cigar industry. A preliminary analysis of the data shows the effects on the women of the abandonment of cigar factories incident to the introduction of the machine, through transfer of plants to other localities, or through the merging of plants. Most of these women were experienced cigar workers and a large proportion of them were well past their youth. Of the 1,088 reporting on the subject, one-half had been employed in the industry for 10 years or longer, almost one-fifth for 20 years or more. Nearly three-fifths of the women were 30 years of age or older; almost one-third were 40 or more. Since the abandonment of the factories in which they had been employed, 12.6 per cent of the 1,152 women reporting on this had had no work, only 9.7 per cent had been employed full time, and the remainder—over three-fourths of the total number—had worked only part of the time.

Even the women who had found some employment had in many cases suffered considerable loss of time. The readjustment had caused more than one-third of them to lose 40 per cent or more of the time since their first lay-off. Even in cities in which some opportunities for work in cigar factories still existed, over one-fourth of

the women who found subsequent employment had lost 40 per cent or more of their time.

Of those who had had some employment, more than one-third had found work exclusively in cigars, but more than one-third had never been able to return to the trade in which they were experienced; the remainder had shifted about, working both in cigar factories and in other lines. Even those who were able to return to their trade could not always find work in the particular occupation in which they were experienced. Over one-fourth of the jobs taken by the displaced women had been in some branch of manufacturing other than cigar making, and of the remaining jobs, a little over one-fifth were in hotels and restaurants and laundries, nearly one-third were in other domestic and personal service, and almost one-fifth were in stores.

Some indication of the money loss sustained by the women subjected to the necessity of changed employment appears in the fact that a comparison of wages before and after such change shows a drop for the women who remained in the cigar industry and a much greater decline for those forced to accept work in which they were not experienced.

Both in loss of employment and in loss of wage the older women had suffered more than had the younger, and women who had reached the thirtieth birthday had come to be classified as old for the purpose of this industry. The oldest women had suffered relatively longer periods of unemployment than had the others, and ordinarily the proportion who were unemployed increased with the age of the women. In subsequent jobs, both in cigars and in other work, the decreases in wages were always greater for the groups of women of over 30 than for those younger, and ordinarily they were greatest for the women beyond 40 years of age.

Unemployment of women in the radio industry.

The purpose of the survey of employment conditions in the radio industry was to ascertain what foundation existed for the complaints received of undertime and lay-offs in plants making radio sets and tubes and whether or not it was a local condition or typical of the industry as a whole; also whether or not it was a usual slump recurring from year to year. Labor audits were obtained from firms located in nine States where much of the industry centers, and the data represent employment conditions in factories that made 80 to 90 per cent of the sets and at least 90 per cent of the tubes manufactured in 1929.

The trends of employment are graphically presented in a series of charts; some are for individual plants, while others are composite curves. The charts do not indicate a standard or mode of employment, but picture rather a series of abrupt hills and valleys illustrative of the very highly seasonal nature of the work during the past five years, the recurring depression year after year tending almost to obscure the general upward trend of employment in the industry during that period.

In 24 firms making receiving sets in 1929 that were included in the study, 32,000 men and women were added to the force by August, following the low point in the spring, and before December the vast majority were laid off. Such fluctuation was not new to the in-

dustry, for year after year the recurring depression has been followed by a sharp rebound in the summer that has extended into the fall, only to be followed by another slump.

Study of State laws and regulations pertaining to the installation and maintenance of toilet facilities in places of employment.

In making its investigations of the problems of women in industry in various States, the Women's Bureau has taken into consideration the conditions of the work place because of the effect such conditions are known to have on the health and comfort of employees. This has involved, in all cases, inspection of the sanitary facilities provided for the use of employees, and the inspectors have found great differences in the standards of toilet facilities.

Such differences are due largely to the lack in most States of any definite legal requirements for such facilities. Some States have no laws or regulations whatsoever on the subject. In others having legislation, some or all of the provisions are so indefinite that they can not serve as standards to which all establishments should conform. It is not only important that a law require adequate and separate toilet facilities, but since ideas vary so widely as to what constitutes adequate and separate facilities it is essential that the requirements be so definitely stated that there can be no misunderstanding about them.

Accordingly, to inform the public as to the inadequate and insanitary conditions existing in plants, to emphasize the need for better legislation on the subject, and to point out the definite standards making for improvement were the purposes of the bureau study on this subject. The report will contain an analysis of toilet conditions in the plants inspected by the bureau in its State surveys and a summary of all the State laws and regulations in force, whether under the jurisdiction of the department of labor or the department of health, presenting in chart form the provisions of each law, the types of establishments covered by it, the penalty for violation, and the department charged with the responsibility of enforcement. Such arrangement will enable the reader to see at a glance not only what are the differences in standards but which States have the most definite and inclusive regulations.

The sanitary service of drinking water in places of employment.

In all its surveys of conditions of employment the Women's Bureau has studied the type of drinking facility offered to employees. Because of the insanitary condition of such facilities in many places, an effort to improve them seems urgent. Accordingly, the bureau has summarized its own reports on the types found in various States, studied reports of bacteriological examinations of bubbling drinking fountains and standards for their design, analyzed the State laws, rules, and recommendations pertaining to drinking facilities in places of employment, and conferred with health officials about the question of enforcement of regulations. These data and their analysis are to be published in a popular bulletin.

Bacteriological examinations of drinking fountains show that all vertical-jet fountains retain disease germs from the water that flows back upon the orifice and from the actual taking of the fixture into the mouth; and, furthermore, that many angle-jet fountains can be

contaminated by improper use. The American Public Health Association's standards for the design and construction of drinking fountains require the angle jet, with proper guards and several other features, but most fountains used at present do not meet these requirements. Of 1,500 places of employment in 21 States inspected by the Women's Bureau since 1922, more than 40 per cent provided bubbling drinking fountains for at least part of their employees, but less than 10 per cent of the plants with fountains had the angle-jet type for all their employees.

The State laws and regulations pertaining to drinking facilities show that little action has been taken by health authorities or departments of labor to prevent the use of vertical-jet fountains. Only one State and the District of Columbia require that fountains be angle jet, and in only 17 States do the boards of health or departments of labor recommend this type of installation.

Because of their importance to health, the Women's Bureau advocates that only the most sanitary drinking facilities be used.

Vitreous-enamel workers.

With the introduction into manufacturing of new processes requiring the use of certain solvents and substances of a more or less poisonous nature, the need for scientific investigation of the effects of such materials on employees who handle them, particularly women workers, is being urged by those interested in the problems pertaining to wage-earning women.

As part of its program during the past year the Women's Bureau, in conjunction with Dr. Alice Hamilton, 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. Thus far only a limited number of women and plants have been visited, but additional investigation is planned. From the firms already covered 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.

Hours and production.

A study of hours and production was an important part of the work of the field force during the past year. 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. The selection of plants whose pay rolls contained the data required was a difficult task, since only such plants could be included as had 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. Obviously no formal schedule could be used in plants under such different circumstances, and the records copied in one plant can not be made comparable to those in another because of changes in scheduled hours or in overtime schedules, or because of the various types of changed conditions. Accordingly, the data from each plant require separate tabulation and analysis. In six basic industries—candy, cigars,

clothing, metal and metal products, textiles, and watches—records were copied from the pay rolls of about 15 plants by the agents of the Women's Bureau.

Women in the medical profession.

In cooperation with the University of Chicago the Women's Bureau has been engaged in a survey of women in the medical profession in order to obtain information on the following points: Whether women are selecting specialized types of practice within the profession; to what extent limitations such as sex prejudice, custom, or outside responsibilities affect their choice and the nature of their practices; and to what degree women practitioners cooperate in professional enterprises. Approximately 3,500 questionnaires were sent out to women physicians selected from the directory of the American Medical Association. About 1,000 replies were received.

Human waste in industry.

The past few months have seen the formulation of the preliminary program for an important study of human waste in industry, which will be wide in scope, of great significance, and in line with the Women's Bureau 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 resulting from such changes, and the systems used by wise managements to guard against throwing employees out of work by the shift from one method to another, through absorption and adjustment of displaced workers within the plant or industry or within other industries; and (2) to compile information of value to other managements faced with similar problems and seeking help in the solution of such problems. The Women's Bureau already has undertaken a part of this investigation, working in cooperation with the Bell Telephone System, which, in changing over to the dial system, has made careful study and evolved efficient solutions of these problems of displacement and adjustment.

Women in the Government service.

Because of the many inquiries received in regard to the status, salaries, and opportunities of women in the service of the United States Government, considerable work has been done in collecting available and recent information on the subject. In this study particular attention has been given to the status of the professional woman. Figures have been collected from the departments showing the number of women in professional service in 1930 in relation to the number of men, and the proportionate numbers of each sex with salaries below $3,000 and of $3,000 or more. Study has been made of the civil-service examinations given during the year 1928—the latest available data—in an attempt to determine the number and variety of professional and scientific positions potentially open to women, and this has been supplemented by figures showing the actual number and quality of appointments of women made during the fiscal year 1928 and by a brief account of the opening of the civil

service to women, the methods and possibilities of promotion for women, and the number and variety of their positions in each department at the present time.

Domestic-service employees in Philadelphia.

Another piece of work handled by the bureau was the tabulation of data contained on questionnaires answered by domestic workers in an extensive study of domestic employment being conducted by the Philadelphia Council on Household Occupations. As part of this study the bureau also prepared tables of data collected by the Philadelphia organization from employers of domestic workers. The report now being prepared by the Philadelphia agency in consultation with the bureau will be published by the bureau and will prove a valuable contribution to the controversial "servant problem."

Married women workers.

From work sheets prepared in Bryn Mawr College the bureau has drawn up tables for a study on married women in industrial plants in and around Philadelphia, the survey having been inaugurated by Dr. Susan M. Kingsbury, of the department of social economy of Bryn Mawr College, as a piece of research work for students in her department specializing in the problems of women in industry. The work sheets were made up from questionnaires answered by employers of women as to the position and status of married women in their employ, as well as to their preference for married women workers and their willingness to employ them.

RESEARCH WORK

The study of material contained in such sources as the State labor laws and the publications and records of the various State labor departments, the United States Bureau of Labor Statistics, the United States Bureau of the Census, the International Labour Office, and nongovernmental organizations has been an important factor in the bureau's program during the past year.

Much material of this nature has been compiled and sent out in reply to requests constantly being received from individuals and organizations throughout the United States and in other countries. Information is collected also from numerous publications and records for use in connection with the bureau's own surveys.

The following studies, discussed in preceding pages of this report, have been or are being prepared within the research division of the bureau:

Chronological Development of Labor Legislation for Women in the United States.
A Study of Two Groups of Denver Married Women Applying for Jobs.
Industrial Home Work.
Industrial Accidents.
Prevailing Wage Standards for Women in Some Countries That Are Members of the Pan-Pacific Union.
The Sanitary Service of Drinking Water in Places of Employment.
Study of State Laws and Regulations Pertaining to the Installation and Maintenance of Toilet Facilities in Places of Employment.

Lists of references on various subjects, including unemployment, vocational guidance, and budgets for wage-earning women, have been prepared and sent out upon request.

The News Letter.

The News Letter has been issued periodically throughout the year, reporting current activities relating to working women in this and other countries. Such information has included legislative enactments in the various States and countries; the findings of investigations relative to hours, wages, working conditions, occupations, budgets, health and safety problems, trade-unions, of women at work here and abroad; notes on conferences and meetings of interest; changes in personnel among State labor officials; and other matters that come to the attention of the bureau through constant research and observation.

Labor legislation for women in 1929–30.

A close watch has been kept on all labor legislation pertaining to women workers in foreign countries as well as in the United States. A record has been kept of any new laws passed and changes in old ones during the year, and information has been given out from time to time in various forms, in answer to inquiries about these laws, in the News Letter statements and in special articles.

Regular legislative sessions in 10 States and special sessions in several others during 1930 yielded little in the way of legislation directly affecting women workers. In New York, however, amendments to the hour law now require in factories and mercantile establishments a weekly half holiday if more than eight hours are worked on any day in the week, and they also forbid any overtime in connection with the 48-hour 6-day week. Several fair-wage or minimum-wage bills were introduced in both houses of the New York Legislature, but were defeated, and a bill to allow the employment of women in restaurants between 10 o'clock at night and 6 o'clock in the morning again was introduced and defeated.

Although previously held unenforceable by the attorney general of the State, the night-work law in New Jersey, without additional legislative action, was put into effect during the past year by the newly established bureau for women and children. A bill further regulating home work by requiring the licensing of contractors and distributors was passed by the legislature in this State, was approved by the governor, and is now law. Another bill to extend the night-work prohibition to women in restaurants was defeated.

Several pieces of legislation affecting women were before the Massachusetts general court. Notable among these was a bill to change the wording of the hour law so as specifically to cover women employed "in or in connection with" the listed industries or establishments. The law as it still stands specifies women "in laboring" and, according to a decision of the State supreme court, covers only women who do physical labor. Another bill not enacted called for an investigation of married women gainfully occupied, their financial condition, and their other means of support.

Unsuccessful efforts were made in South Carolina to establish a 48-hour week in cotton and woolen mills, to prohibit the employment of women and girls after 10 o'clock at night, and to limit the number of looms to be operated by a mill worker.

Though not the result of legislative action, it is important to note that Pennsylvania established in the bureau of inspection a women's

and children's section with power to supervise generally the enforcement of laws and regulations governing the employment of women and minors. This section is distinct from the bureau of women and children, which is a research bureau except for its supervision of home work, labor-law enforcement always having been conducted by the bureau of inspection.

PUBLIC INFORMATION

The activities of the Women's Bureau in broadcasting its findings do not stop with the publication of its bulletins. Since the material these contain is largely of a scientific, technical, and statistical nature, it is necessary to translate it into popular form, with emphasis on its human interest, so as to make an appeal to the general public and to carry on the educational program necessary to bring about an understanding not only of the function and value of the bureau but of the importance of giving due consideration to all matters pertaining to wage-earning women.

Such popularization of facts and figures constitutes the special task of the division of public information. This work has shown steady progress and considerable expansion during the year. It has included the preparation and distribution of news releases on all the bureau publications issued in the 12 months; on the outstanding activities of the bureau; on speeches by the director and other members of the staff; on their participation in conferences throughout the country; and on exhibits prepared and circulated by the bureau. In all, about 50 news releases have been written and sent out, the great majority of them to approximately 3,000 correspondents and editors of newspapers and periodicals, these constituting a veritable and efficient network for spreading broadcast the various types of information to be disseminated by the bureau.

Under the direction of this division have been prepared many special articles—seventy-odd in number—on the bureau's activities; on its new bulletins as they have been issued; and on various other timely subjects, such as health problems, labor laws, family and economic responsibilities, hours, wages, working conditions, standards of employment, economic old age, and married-women workers, all from the viewpoint of women. These articles have been prepared for a variety of uses, chiefly for newspapers and periodicals ranging in type from the extremely popular to the most scientific and technical. Several different kinds of yearbooks and encyclopedias have requested and been furnished with summaries of the bureau's activities or discussions of particular subjects. Special messages for Labor Day and New Year's Day were sent out and were given considerable space in the press. Several radio talks were delivered by the director of the bureau in cooperation with nongovernmental organizations. Upon request a number of reviews of reports on women workers issued by agencies outside the Government were written by members of the bureau staff for use in educational periodicals.

A new service, entitled "Uncle Sam and the Woman Worker," was inaugurated in June of the present year, on the tenth anniversary of the bureau as a permanent organization. The series consists of short popular articles issued weekly and designed for use by the

woman's page or column in newspapers and periodicals, about 1,400 publications being served in this way. Women responsible for a woman's radio program also have been receiving and making use of this material. In general the articles are everyday, common-sense talks along the line of economic and social problems relating to women workers. The activities and standards of the Women's Bureau as well as the various problems pertaining to wage-earning women as workers, breadwinners, home makers, mothers, citizens, members of a community, have formed and will continue to form the themes of these releases. They will include also discussions of occupations and personal data as related to women workers, human-interest stories, word pictures of jobs, and descriptions of changes in industrial methods affecting women. With the constant growth in the number and proportion of women wage earners, there is increasing interest on the part of most women in these matters and increasing demand for material along these lines in the daily press and periodicals. Not only wage-earning women themselves but many others, because of the demands of club work, citizenship duties, or family interests, are seeking such information.

Copies of all articles and releases are kept on file and constitute a storehouse of valuable information that is drawn on again and again in response to appeals for information on various topics concerning women workers constantly pouring into the bureau.

Another type of work requiring considerable time and expert attention is that of interviews with individuals, representatives of organizations, correspondents and special-feature writers for newspapers, and magazine editors and writers who apply to the bureau for authentic material and data for use in their own activities.

Several popular bulletins containing attractive illustrations have been in the process of preparation, one consisting of a series of short articles about the contents of bureau publications on various topics, another dealing with the exhibits circulated by the bureau, and a third discussing the history and achievements of the Women's Bureau.

Exhibits.

The preparation and circulation of popular exhibits, such as models, motion pictures, maps, charts, posters, and folders, has always formed an important feature in the Women's Bureau program. These displays are lent free of charge, the borrower paying transportation charges on all material that can not be sent under frank. Certain wall exhibits, however, are not only sent free but given for permanent use. All material is used intensively and extensively by schools, colleges, universities, churches, employers' associations, labor and industrial groups, and women's organizations everywhere in the United States and also in a number of foreign countries, particularly in connection with educational courses, conventions, conferences, and other meetings. During the past year exhibits have been sent to 41 States, the District of Columbia, and Hawaii, and to the following foreign countries: Argentina, Canada, Japan, Scotland, and Switzerland. The special exhibit, "The American Woman at Work," sent to the Iberian-American Exposition in Seville in the spring of 1929, continued to be used at the exposition

until its close in the spring of 1930. At that time the exhibit was awarded a gold medal by the Iberian-American Commission and then was lent by the bureau to Spanish authorities for continued educational use in Spain.

Participation in such international expositions as well as in national ones of a less pretentious nature is one of the important ways in which the bureau aims to reach and to educate the public in regard to important facts about women workers. For this reason the bureau welcomed the opportunity to participate in the National Industrial Exposition held in Chicago in March, 1930, sponsored by industrial engineers, free space being granted the Women's Bureau for its exhibits. In this way the bureau's activities and its standards for the employment of women were brought to the immediate attention of executives in industry, employers and managers of companies exhibiting under the same auspices, and delegates and speakers at the National Management Congress held in Chicago during the same week and in close connection with the exposition. In many instances these representatives were from firms employing large groups of women engaged in the manufacture of the industrial equipment on display at the exposition and were concerned about many of the same problems pertaining to women workers as fall within the scope of the Women's Bureau studies. As part of the Women's Bureau program at the exposition were health features for women workers put on by industrial organizations of national importance, employing large groups of women and noted for the high standards in force in their plants. Considerable interest was shown in the Women's Bureau booth by participants in and visitors to the exposition, a number of requests for information on various technical subjects being received and complied with by the division of public information.

Another type of exhibit, of which gratifying use has been made, comprises pictures of women engaged in various processes and illustrates good and bad conditions in plants and service facilities found in up-to-date establishments employing women. These pictures are actual photographs taken in many different plants throughout the country and in most cases presented to the bureau for use by employers. A file of these pictures is maintained in the bureau, in order that copies with appropriate captions may be given or lent to individuals and organizations for illustrative and educational purposes.

The new exhibits prepared by the bureau during the year consisted of a poster for use with the motion picture, "The Story of the Women's Bureau," and the following charts: A set of five charts on negro women, showing industrial distribution, earnings, hours, and time in the trade of several thousand negro women studied by the bureau and the industrial classification of all negro women reported by the census of 1920 as gainfully employed; and six graphic and pictorial charts on salesgirls in 5-and-10-cent and other limited-price shops, showing their daily, weekly, and Saturday hours as well as rates, earnings, age, marital status, and living conditions. A new popular folder giving an outline of the bureau's functions and a topical presentation of its publications also was prepared and given wide circulation.

The use of exhibits was greatly stimulated through the distribution from time to time of descriptive lists and circular letters concerning the exhibits.

COMMENT AND RECOMMENDATIONS

The fact that women have been in a weaker economic position than have men necessitates greater consideration and control of standards for their employment. Therefore the upbuilding of safeguards is necessary, to conserve alike the industrial efficiency and the health of women 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, the industries, and society as a whole.

This important function of the bureau is limited only by the lack of an adequate appropriation. The small amount of money that has been allotted to it does not meet the numerous requests for information in regard to the employment of women that continually are being made of the bureau, nor does it permit the proper response to the many appeals for the cooperation of the bureau with other organizations interested in the advancement of wage-earning women. To be able to supply all the required information, the bureau should conduct a number of additional studies of the many complex situations confronting women workers. Every year the bureau has been obliged to refuse requests for surveys and investigations that are essential for compiling and supplying the types of information desired.

Of the over eight and one-half million women gainfully employed, according to the census of 1920, almost half are working in the present-day complex business and industrial situation. It is these women who help in the making of all the things that go to furnish the home and clothe and feed the family, of practically all the articles in everyday use, in fact, and who also help through their earnings to replenish the family budget so that these numerous things may be purchased, thus playing an important part in upbuilding and maintaining prosperity for the country as a whole.

There are many hazards that confront these women at work. One of the most outstanding is the hazard of the long day, which is dangerous to the health of the workers. Then there is the hazard of unemployment, met especially by the older women in this mechanized world. All such questions need to be studied and analyzed with care, so that reliable information on the many vital issues of to-day can be secured and made available.

After all, the job is the biggest thing in the working woman's life, because on the job depends her whole existence and in so many instances that of the family to which she belongs. The theory that women work only for pin money has long been exploded. Through its investigations the Women's Bureau has found that instead of engaging in gainful occupations for extra money to spend on unessentials, women as a whole have definite financial responsibilities and are contributing their share to the family budget. Contrary to the belief that women are or should be set apart from the economic

scheme of existence, they are found now to be doubly responsible in the family life, first through the money that they make and contribute to the family purse, and second through their performance of inescapable home duties. Women do much of the work in the home and in many cases have the entire financial responsibility as well.

Certain much-needed studies that have been advocated and discussed in some detail in previous annual reports are as follows:

Occupational hazards, the piece work system, the married woman in industry, posture at work, and women in semiprofessional and professional pursuits.

Occupational shifts.

When the figures from the census of 1930 become available, it is hoped and believed that they will afford considerable data to enable the bureau to make at least partial replies to some of the inquiries it frequently receives as to the status and occupations of women in the population of the United States. These inquiries include, for example, questions as to whether the proportion of women who are entering industry and the professions is on the increase, to what extent women are displacing men or men are supplanting women in the various types of employment, and what is the trend of any occupational shifting that may be ascertainable. It is hoped that the new census of unemployment may furnish a basis for determining in some degree the extent to which women are affected by this condition, and that the Women's Bureau can make the necessary analysis of census data pertaining to gainfully occupied women.

State reporting and organization for handling problems affecting employed women.

The data the bureau has assembled on industrial accidents show the extent to which it is possible to obtain such information from reports by the States. Additional reports on this subject should be followed and the material they afford collected and analyzed from time to time with a view to obtaining further knowledge of the frequency, character, causes, and means of prevention of such accidents. In addition, the bureau's information on legal changes and court decisions in the States should be kept up to date and studies should be made of the organization maintained or the facilities provided in the various States for the handling of problems affecting employed women.

Employment experiences.

An important part of the knowledge that constitutes the foundation for employment adjustments that will meet the needs of employed women and contribute to the efficiency of industrial organization lies in the mass of individual experiences. Every opportunity should be taken to build up an increasing body of information in regard to the personal experience of women as to regularity of employment, adequacy of earnings, extent of economic responsibilities, effect of age on opportunities, and other factors in their industrial life whether in various jobs or for considerable periods in the same work.

Standard equipment for health and safety.

It is important for the bureau to make detailed and scientific studies, similar to the ones conducted during the past year on drinking and toilet facilities, of such important factors making for the health, safety, and comfort of women workers as 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.

Industrial poisons.

The bureau urges an intensive and extensive investigation of special hazards to women employed in occupations involving the use and handling of materials that may affect their physical well-being; the study of methods used by employers to protect them; and the effectiveness of such protection.

Each year brings changes in industrial practices that involve the use of materials that may prove dangerous to women—for example, the development of the use of radium in paint and the new substances that are appearing constantly in pastes, dyes, and other compounds.

These hazards to women are increasing everywhere at an alarming rate. Comparatively few employers are aware of this insidious type of danger and few recognize the need of precaution. Most States have no legislation on the subject, and those that have laws experience difficulty in controlling the situation because of the constantly changing processes and substances involved. Research to prevent or to reduce such hazards must keep step with these changes, and must be undertaken by the bureau if its duty in formulating policies and standards of employment for women is to be fulfilled.

The technical reports available on the subject of industrial poisons are of value chiefly to experts. Moreover, only the informed would know how to secure and to take advantage of them. There is great need of general information about the poisons that are known to exist in materials used for certain purposes, the jobs that may involve contact with poisonous substances or fumes, the symptoms indicating poisoning, the working conditions surrounding such occupations, and the precautions that can be taken to reduce these hazards. Women workers themselves, as well as employers, constantly are requesting of the Women's Bureau information of this kind, and a small beginning has been made in supplying such information for a single type of work—the coating of sheet and cast iron with vitreous enamel. Owing to lack of funds, even this one study can not be carried out completely, and it is obvious that the more comprehensive research that is so greatly needed will require considerable increases in the funds of the bureau.

It is a recognized fact that the preparation of such technical information in popular and readable form for general distribution involves great difficulties. The subject and type of study require special attention to insure the best results at the lowest cost, and certain technical aspects require expert knowledge that can be supplied only by the highest authorities in their respective fields. Hence, the bureau's

desire is to be enabled to hold frequent consultation with recognized authorities, so that employers of women may have confidence that its conclusions and recommendations are based upon scientific method and experiment, as well as being wise and practicable.

The field work in a study of industrial hazards in women's employment requires a knowledge of industries and occupations that can be supplied by the Women's Bureau, and the Women's Bureau only, since its staff has expert knowledge of conditions in industry and since the problems involved are national in scope.

Respectfully submitted.

MARY ANDERSON, *Director.*