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LABOR LAWS FOR WOMEN IN INDUSTRY IN INDIANA

REPORT OF A SURVEY
BY THE WOMAN IN INDUSTRY SERVICE
UNITED STATES DEPARTMENT OF LABOR

AS SUBMITTED TO THE
GOVERNOR OF INDIANA

DECEMBER 31, 1918
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REPORT ON THE PROGRESS OF THE WORK OF THE FEDERAL RESERVE BANK OF ST. LOUIS

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WOMEN IN INDUSTRY.

This war brought many changes in the industrial and social life of the State and none was more significant than the increasing number of women in industry. Some women were moved by a desire to render a definite service in the war, while others were attracted by the high wages offered.

Employers have found these women in industry most efficient laborers, often excelling men in the same class of work.

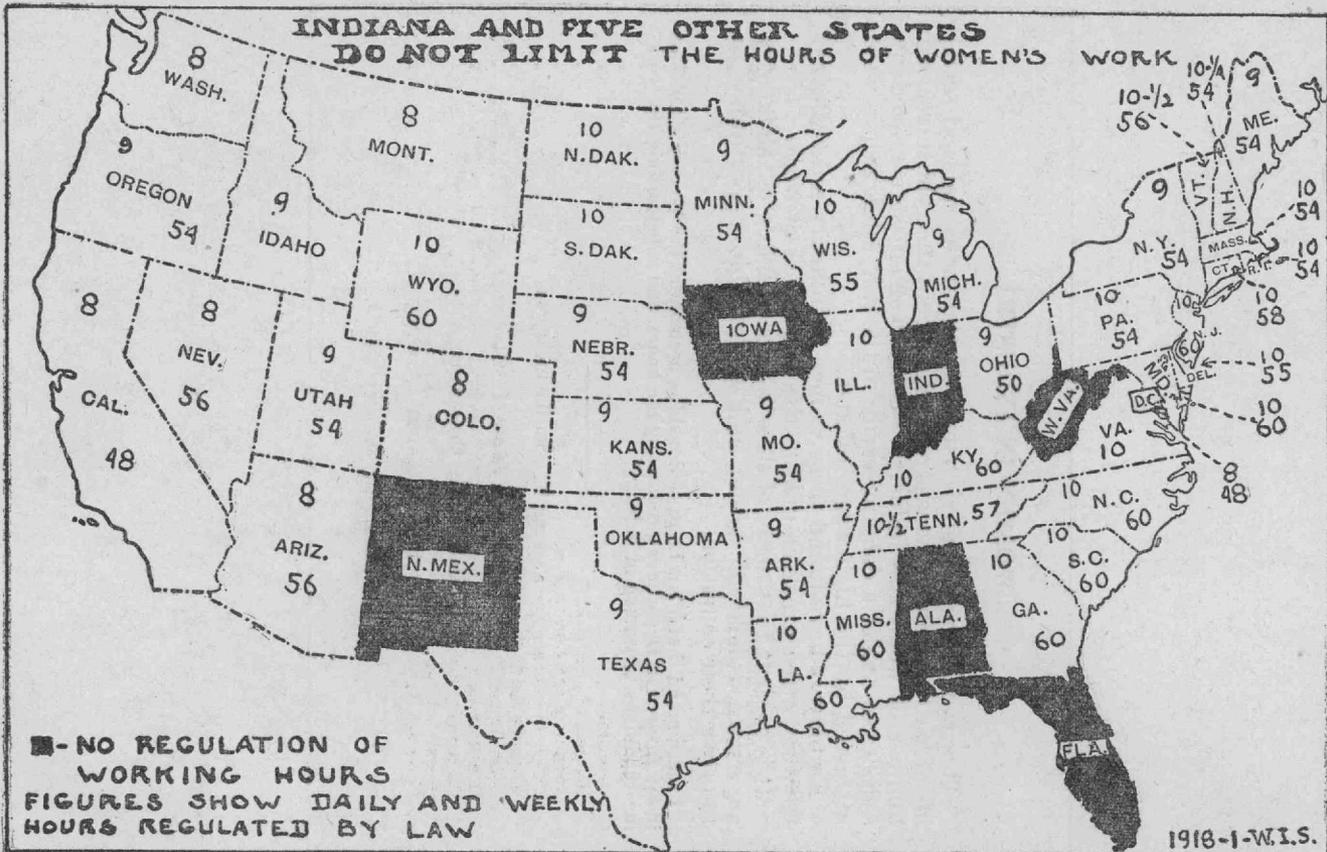
It is evident that many of these women will find in the factory an enlarged field of action and a desirable opportunity to improve their condition.

I recommend that a law be passed making permanent the Women's Division in the Inspection Department, regulating the hours, and safeguarding the working conditions of women in industry.

Paragraphs from the message of
GOVERNOR JAMES P. GOODRICH
Delivered at the opening of the
Indiana General Assembly
Thursday, January 9, 1919.

INDIANA AND FIVE OTHER STATES

DO NOT LIMIT THE HOURS OF WOMEN'S WORK



■ - NO REGULATION OF WORKING HOURS
 FIGURES SHOW DAILY AND WEEKLY HOURS REGULATED BY LAW

1918-1-W.I.S.

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
WOMAN IN INDUSTRY SERVICE,
Washington, December 31, 1918.

SIR: We have the honor to submit the accompanying report, giving the results of a survey undertaken by the Woman in Industry Service at the request of the governor of Indiana and the industrial board of the State. In acknowledgment the governor has written the following letter to us under date of January 17, 1919:

I have your letter of the 31st and thank you for the report of your first tentative draft. We appreciate very much the valuable assistance your department was able to render us in this State. I feel sure it will help the legislature in arriving at the right sort of conclusion in dealing with these questions.

The survey was made between November 20 and December 20, 1918. It was directed by Miss May Allinson, assisted by Miss Agnes L. Peterson, Mrs Ralph Best, and Miss Mary N. Winslow, of the staff of this service. The Bureau of Labor Statistics of the Department of Labor assigned Miss Alice Mueller to assist in the field work. Mrs. Arthur T. Cox, special industrial inspector for the industrial board of Indiana, and Mr. George W. Greenleaf and Miss L. E. Fredericks of the inspecting force of the board, also cooperated in the investigation.

Respectfully,

MARY VAN KLEECK,
Director.

Hon. W. B. WILSON,
Secretary of Labor.

LETTER OF TRANSMITTAL

The following report was prepared by the Board of Directors of the Federal Reserve Bank of St. Louis, Missouri, for the purpose of presenting to the Board of Governors of the Federal Reserve System a statement of the results of the operations of the Bank during the year ending June 30, 1924.

The report is divided into two parts, the first of which contains a statement of the assets and liabilities of the Bank, and the second of which contains a statement of the income and expenses of the Bank.

The assets of the Bank at the end of the year were \$1,000,000,000, and the liabilities were \$1,000,000,000. The income of the Bank during the year was \$1,000,000,000, and the expenses were \$1,000,000,000.

The Board of Directors of the Federal Reserve Bank of St. Louis, Missouri, is pleased to present this report to the Board of Governors of the Federal Reserve System, and to the public.

LABOR LAWS FOR WOMEN IN INDUSTRY IN INDIANA.

FOREWORD AND SUMMARY.

Two weeks and a day after the signing of the armistice there assembled in Indianapolis at the call of Gov. James P. Goodrich, a conference composed of representatives of many important groups in the State to consider a program of reconstruction. Indiana was the first State thus to assemble its citizens for united action in dealing with problems vital not only to the State but to the Nation.

Among problems stressed by the governor and by several speakers were those of women in industry. In advance of the conference the governor had invited the Woman in Industry Service of the United States Department of Labor to make a brief survey as a basis for a program of labor laws regulating the employment of women in industry. A similar invitation was extended to the Woman in Industry Service by the chairman of the State Council of Defense and by the Industrial Board of Indiana, whose inspectors cooperated with the Federal investigators in their work. Especially appropriate and helpful was the cooperation of Mrs. Arthur T. Cox, special industrial inspector for the industrial board. This was the first position ever held by a woman in connection with the administration of labor laws in Indiana. The appointment made by the governor during the war, with expenses paid from his contingent fund for war emergencies, marked an important step forward in securing more adequate protection for the working women of the State. The fact that this was done as a war emergency, however, raises the whole question of the further action which may be necessary as a permanent program. With this in view the Woman in Industry Service undertook the collection of necessary data.

The survey was brief, beginning about November 20 and lasting until December 20, 1918. Table 1 shows the number of establishments investigated and the number of women employed in them.

TABLE 1.—*Number of establishments included in investigation and number of women employed, by industries.*

Industry.	Number of establishments investigated.	Number of women employed.*
Metal products.....	42	5, 198
Textiles.....	16	2, 579
Drugs.....	1	1, 000
Food products.....	11	994
Pottery and glassware.....	10	648
Paper and paper products.....	9	500
Rubber goods.....	2	420
Laundry.....	6	323
Tobacco manufacture.....	1	160
Wood products.....	5	133
Caskets.....	2	49
Printing.....	1	35
Leather goods.....	1	35
Transportation.....	3	226
Total.....	110	12, 300

* Of 112 establishments visited, two, one in the group engaged in transportation and one making pottery and glassware, did not report numbers of women employed.

Thus 112 plants employing more than 12,000 women were inspected. They were located in Indianapolis, Logansport, Marion, Kokomo, Anderson, Richmond, Terre Haute, and Winchester. In addition 83 women employed in Indiana industries were interviewed at home or elsewhere in order that the workers' experience and points of view might be fully represented in any recommendations to be made.

Attention was focused upon those conditions which most needed correction and upon those establishments which had demonstrated the practicability of high standards and it was with this twofold emphasis in view that the plants to be inspected were chosen. The scope of the inquiry was limited to hours and working conditions, that is, to those subjects which in other States have been regulated by labor laws for the longest period. In general the inquiry was confined to manufacturing industries, since in them the problems affecting women seemed to be most urgent and pressing. Equally important are the conditions of employment in other occupations, such as employment in mercantile establishments and in transportation; but with the limited time for the survey, so wide a field could not be covered. It is safe to assume, however, that the protection necessary in factories against unduly long hours is equally necessary in other forms of employment.

Although no aspect of the labor problem is more important than wages, it was not possible to include this subject in the investigation. It is desirable to point out, however, that in view of the great changes brought by the war, provision should be made for careful analysis of the wages of women in Indiana.

No comprehensive statistics are at hand to show how many women are now employed in the industries in Indiana. Even before the war the number of women gainfully employed in the State was growing rapidly. In 1880, according to the census, 51,422 women and girls were gainfully employed. In 1910 the number had increased to 155,731. This increase was more rapid than the increase in the total population of women. In 1880, 7.2 of every 100 women and girls 10 years of age and over were gainfully employed, while in 1910, 14.8 in every 100 worked for wages.¹ If the percentage of increase since 1910 has been only as large as between 1900 and 1910, the total number of wage-earning women in the State must now be approximately 200,000. Because of war conditions, it is probable that the number is considerably larger than this.

In 1910, the women in manufacturing and mechanical pursuits in Indiana numbered 39,087, or 25.1 per cent of those gainfully employed. It seems fair to estimate that in 1918 the number thus employed was at least 50,000. In 1910, of every 100 women gainfully employed, 58 were in occupations other than domestic and personal service and agriculture, including 25.1 per cent in manufacturing and mechanical industries, 2.5 per cent in transportation, 8.1 per cent in trade, 0.2 per cent in public service, 12.8 in professional service, and 9.6 per cent in clerical occupations.² If these same proportions held in 1918, it is probable that the number of women in the occupations other than domestic service and agriculture at

Thirteenth Census of the United States, 1910. Vol. 4. Population. Occupation Statistics, p. 37.
¹Ibid., pp. 48-49.

the close of the war was at least 116,000. The growth of the war industries probably increased the number thus estimated by several thousand, thus creating for the State conditions demanding thorough consideration.

SUMMARY OF FACTS.

1. Indiana is one of 12 States having a law prohibiting the employment of women at night in at least one group of occupations, but Indiana is also one of the six States having no law limiting the hours of women over 18 years of age.

2. The lack of such a limitation makes possible abnormally long hours of employment for women. (a) In 34 establishments, 30 per cent of all investigated, the regular working day without overtime was 10 hours or more for 2,817 or 23 per cent of the women employed in the shops visited. (b) Reports of overtime were made for 53 establishments employing 8,331 women, and of these, 13 establishments, employing 1,993 women, had a working week of 65 hours or more. (c) Specific instances of overtime legally possible in Indiana showed women working as long as 65 hours in a week in a clothing factory, 73 hours in one cannery and 84 hours in another, 75 hours in a seven-day week manufacturing caskets, and 88 hours and 40 minutes in an establishment manufacturing automobile parts.

3. In establishments in which such long hours are possible it is exceedingly difficult to enforce the legal limitations upon the hours of work of girls under 18 years of age. Indeed enforcement is impossible without rigid requirements for documentary proof of age, and a much larger inspection force than the State now has.

4. A mass of evidence is available both in this country and abroad showing the serious effects of long hours of employment upon the health of women. This evidence has been accepted by the Supreme Court of the United States as justifying under the Constitution the use of the police power of the State in limiting the hours of employment of women as a necessary measure in the interest of the public health.

5. Evidence is also available showing that in the long run output is increased by the shortening of hours, and this evidence is corroborated in the experience of Indiana establishments. Greater output is due to better health and hence greater efficiency, less absenteeism, and less "labor turnover."

6. A number of Indiana establishments have already established the eight-hour day and find it satisfactory from the point of view of the health of the workers and the quantity of output. Of those investigated, 11 establishments, employing 1,137 women, had a working day of eight hours.

7. In working conditions, including washing and toilet facilities, provisions for seats, rest rooms and lunch rooms, safeguarding of machinery, ventilation and lighting, great variety has been found in Indiana factories. Specific codes are needed to establish clearly and definitely standards which shall result in bringing the worst conditions up to the level of the best practice already established in many establishments in the State.

8. The results accomplished by the special industrial inspector, the only woman in the bureau of inspection during the war, are noteworthy. Her work demonstrates the necessity for extending it,

and for making special provision for the administration and enforcement of measures of protection for women workers by women directly responsible to the industrial board.

RECOMMENDATIONS.

Hours of work.

It is strongly urged that Indiana now join with those States which have placed their industries on the healthful and efficient basis of the eight-hour day.

Working conditions.

It is recommended that a bill be drawn embodying the best features of the laws of other States and the best practice in Indiana establishments, establishing a minimum of sanitation and comfort in factories, and that in addition the industrial board issue explicit recommendations for service facilities which it may not be advisable to include in the law at this time but which are desirable as standards to be advocated.

Administration of labor laws.

Three distinct tendencies are marked in the administration of labor laws in this country. The first is the enforcement of specific statutes enacted into law by the State legislature. The second is the establishment of an industrial commission without statutes to enforce but with power to establish safe and healthful conditions through regulations having the force of law. The Wisconsin plan is an example. The third is the combination of the two, as in New York State, where the industrial commission has definite laws to enforce but is instructed also to formulate codes which, after public hearings, become part of the labor law.

As it was not possible in this investigation to make a study of the administration of the laws of Indiana and as the whole subject is very important it is urged that provision be made for a thorough inquiry into the best form of administration for Indiana.

Meanwhile it is recommended that in view of the importance of the problems of woman in industry, the industrial board be enlarged to include at least one woman in its membership, and that, when a study is made of the administration of the laws, attention be centered upon the desirability of establishing as in several other States, a special bureau for women in industry, whose chief shall be directly responsible to the industrial board, with power adequately to safeguard the health of women workers in the States and to study their needs.

CONDITIONS OF EMPLOYMENT OF WOMEN IN INDIANA.

In the State of Indiana, as in other States, a number of establishments employing women have set a high standard in the conditions of their employment. Unfortunately other establishments in competition with them have fallen far short of accepted standards. It is the purpose of labor legislation to establish a uniform minimum which shall prevent any employer from injuring the State through the shortsighted policy of permitting long hours and insanitary working conditions. It is the worst industrial practice which shows most clearly the necessity for legislative action, while the best establishments demonstrate on the basis of practical experience in business that the proposed legislation is feasible.

In this report, therefore, emphasis is laid on those conditions needing correction through amendments to the present law dealing with both the provisions of the law and their enforcement, while the recommendations are based upon the practice now prevailing in the best Indiana establishments and sanctioned also by experience in other States.

In the United States as a whole there is a growing tendency toward a shorter work day. According to the Census of Manufactures,¹ in 1909, 30.6 per cent, or about one-third of the total number of workers, worked 54 hours or less, while in 1914, 51 per cent, or more than one-half, were in this group. The same report shows that in 1909 weeks of 60 or more hours prevailed in 8.7 per cent of the total number of factories, while in 1914 the per cent was reduced to 5.8. Indiana has not quite so good a record as the neighboring States of Ohio and Illinois.² In Ohio, in 1914, 51.9 per cent of the total number of wage earners worked 54 hours or less; in Illinois, 57.9 per cent, while in Indiana only 41.6 per cent had the shorter working week.

HOURS OF WORK.

The law of Indiana declares that "No person under 16 years of age, and no female under 18 years of age, employed in any manufacturing or mercantile establishment, laundry, renovating works, bakery, or printing office shall be required, permitted, or suffered to work therein more than 60 hours in any one week, nor more than 10 hours in any one day, unless for the purpose of making a shorter day on the last day of the week."

The only restriction on the employment of women over 18 years of age was enacted into law in 1899 prohibiting the employment of any woman or female young person in any capacity for the purpose of manufacturing between the hours of 10 o'clock at night and 6 o'clock in the morning. In other occupations employment at night is not prevented by law.

This provision places Indiana in the group of 12 States which have been so progressive as to protect women workers against employment

¹ U. S. Census of Manufactures Abstract, 1914, ch. 9, p. 482. Table 212.

² Ibid, p. 490, Table 214.

at night in at least one occupation; but the fact that it is the only restriction on the hours of work of women over 18 years of age and that no limitation is provided in the length of the working day, places the State in the group of six which have not adopted this important measure of protection for the health of their citizens.

A woman over 18 in Indiana breaks no law if she begins work in a factory at 6 a. m. and works until 10 p. m. and has one hour for her noonday meal; i. e., 15 hours a day. She may work all night cleaning windows of railway cars switched far up in the yards in lonely places, or she may wrap bread all night long that the bakers' customers may have warm, fresh bread for Saturday and Sunday, and her employer breaks no law, since this work is not included in the occupations regulated by legislation.

LENGTH OF THE WORKING DAY.

For the women who are not protected by law from overstrain due to long hours, the length of the working day which is in force throughout the State in the establishments investigated would seem to be a serious menace to health and efficiency.

The following table gives the prevailing working hours in the establishments which were visited:

TABLE 2.—*Length of working day in 110 establishments investigated.^a*

Length of working day.	Number of establishments.	Number of women employed.	Per cent of women in each specified group.
Less than 8 hours.....	2	164	1.3
8 and less than 9.....	16	1,517	12.3
9 and less than 10.....	58	7,802	63.4
10 and over.....	34	2,817	23.0
Total.....	110	12,300	100.0

Thus, in 43 establishments, 30 per cent of those investigated, women were working regularly 10 or more hours a day. It should be noted that this does not include overtime. The hours shown in this table are not illegal for any woman over 18 years of age.

It was the impression of the investigators that because of the long hours prevailing for women workers generally, even the provision of the law protecting girls under 18 was exceedingly difficult to enforce and was very generally disregarded throughout the State. In the establishments visited the employers could give no information as to the number of women under the age of 18 who were employed by them, and this indicated that the young girls were not receiving the benefit to which they were entitled under the law.

In the day nurseries of Indianapolis many little children are cared for while their mothers are at work. In one of them the children are brought in before 6.30 a. m., but at 6 p. m., when an investigator visited the nursery, only three of the 30 children had been taken home. The mothers of several of these children were working 10 hours a day in a factory. These 10 hours do not include their entire

^a Of 112 establishments visited, two did not report length of working day or number of women employed.

time spent in the factory nor their full working day. A woman with a family to care for must get her own breakfast and that of her children, before she starts for the factory, which is often at a distance from her home. Her time then includes her lunch hour, if she lives too far away to hurry home and prepare it, and this means 11 hours in the factory, not merely the 10 hours of actual work. At night there is the dinner to cook, dishes to wash, sweeping to be done, and the hundred and one little things that housewives spend their days doing—and all this after her "day's work." One woman who was interviewed by an investigator said that she had been up until 12 o'clock the night before doing the family washing and had got up at 5 o'clock that morning in order to get breakfast for her family before she started work at 7 o'clock.

Table 3 shows the time when the women began work in the establishments investigated.

TABLE 3.—*Time of starting work in 109 establishments investigated.^a*

Time of starting work.	Number of establishments reporting each specified starting time. ^b	Number of women employed.
6 to 6.30 a. m.....	5	208
6.30 to 7 a. m.....	15	1,694
7 to 7.30 a. m.....	74	7,861
7.30 to 8 a. m.....	20	2,227
2 p. m.....	3	151

Thus the large majority of the women employed, 9,763, began work before 7.30 in the morning. With the time necessary for transportation and for household duties before leaving home, this early opening was a decided hardship for the women workers of the State.

The present law provides that "not less than 60 minutes shall be allowed for the noonday meal in any aforesaid establishment in this State," but a clause is attached that "the chief inspector shall have the power to issue written permits in special cases allowing shorter meal time at noon." Out of 112 establishments visited by the investigators, 35 allowed only 30 minutes for lunch, 16 allowed 40 or 45 minutes, and only 58 allowed the full time required by law. In 3 establishments the length of the lunch period was not reported. It was not discovered by the investigators in how many of these cases permits had been issued by the chief factory inspector, but several of the factory superintendents who were interviewed did not know it was necessary to secure this permission.

It must be remembered that a 30-minute lunch period means that girls often do not have time to go outside for lunch, and unless other provision is made, must eat in the workroom. This is unwholesome, and it increases fatigue. It should be made possible for the workers

^a Of 112 establishments investigated, 3 did not report the time of beginning work.

^b In the 109 establishments reporting on this point, 2 had three shifts and 4 had two shifts, so that there were 117 reports of the time of starting work in 109 establishments.

to secure a hot and nourishing meal, to be eaten outside the work-room. If no lunch rooms are accessible in the neighborhood, one should be maintained in the establishment.

OVERTIME.

In addition to the regular working day, the amount of overtime required has been very considerable. In some establishments this overtime has been maintained for weeks and even months at a time, and this is not due solely to war rush. In the manufacture of candy, tin cans, clothing, in bakeries and laundries, long hours and overtime have been the practice for many years in busy seasons. The maximum number of hours worked during a rush period was ascertained by the investigators sometimes from the statements of the managers but more often through personal interviews with women workers. Tables 4 and 5 give some idea of the tremendous strain to which women in manufacturing establishments have been subjected.

TABLE 4.—*Maximum weekly hours of work in 53 establishments in which overtime was reported.*

Maximum weekly hours including overtime.	Number of establishments.	Number of women employed.
Less than 50 hours.....	3	450
50 and less than 55.....	1	159
55 and less than 60.....	21	3,198
60 and less than 65.....	15	2,540
65 and less than 70.....	6	1,372
70 and less than 75.....	1	83
75 and less than 80.....	2	142
80 and over.....	4	596
Total.....	53	8,331

Thus 53 establishments, or nearly half the number visited, were recorded as having overtime. It is not to be assumed that the others never employ women longer than the regular working day. Accurate reports on overtime are difficult for investigators to secure. The fact, however, that 13 of the 53 establishments for which overtime was reported employed women 65 hours or longer in a week and that these included instances of employment for 70, 75, and 88 hours in a week shows how urgent is the need for legal protection. The three establishments in which the week was less than 50 hours even with overtime were establishments in which the high standard of a regular 44-hour week or less already prevails.

The maximum daily hours reported by 83 women who were interviewed are shown in Table 5.

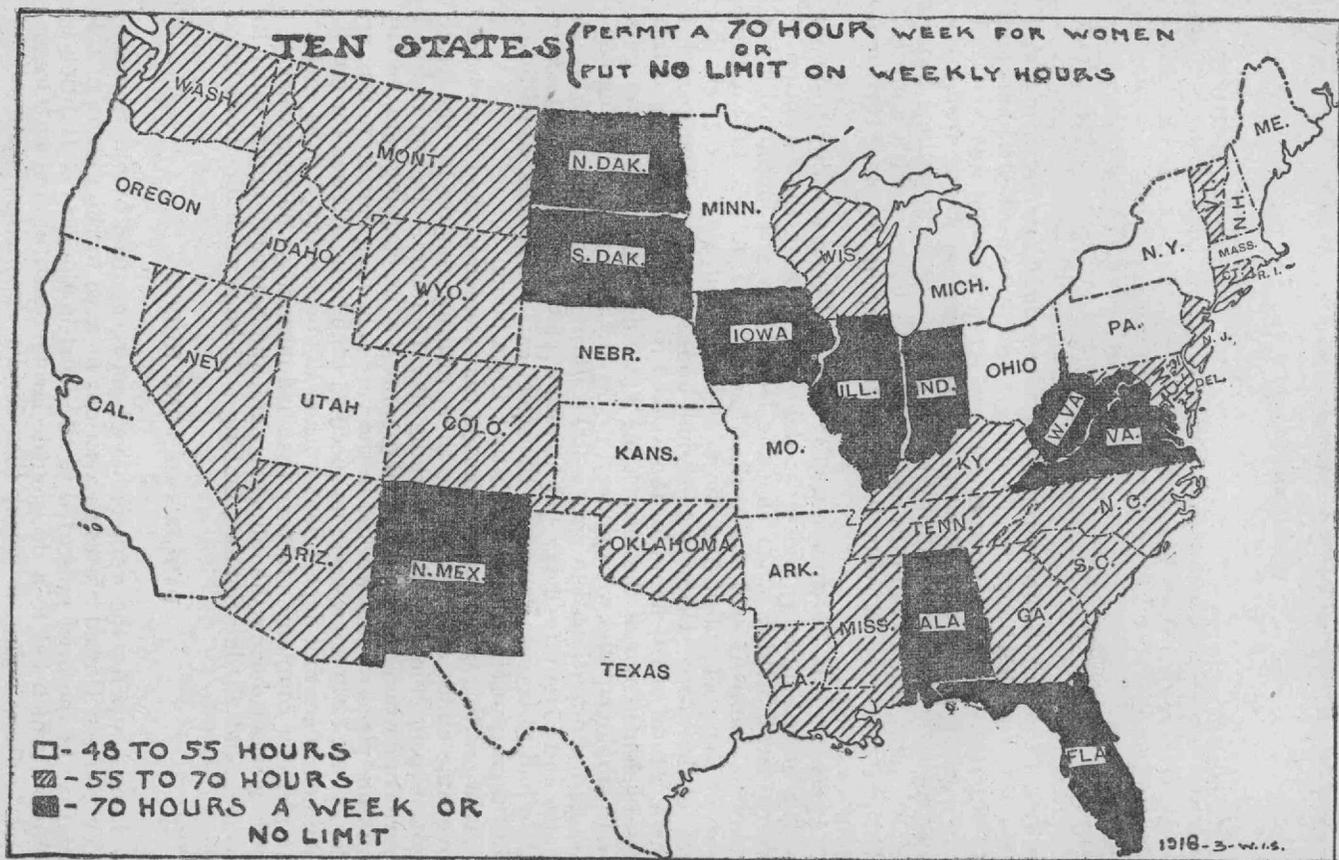


TABLE 5.—*Maximum daily hours reported by women employed in establishments in Indiana.*

Maximum daily hours.	Number of women reporting.
Less than 9 hours.....	11
9 hours and less than 10.....	21
10 hours and less than 11.....	27
11 hours and less than 12.....	4
12 hours and less than 13.....	13
13 hours and over.....	7
Total.....	83

Ten of those in the group reporting maximum hours between 9 and 10 a day worked 9 hours and 50 minutes and three worked 9 hours and 40 minutes. One girl, operating a large screw machine, reported that she worked until 9 o'clock every night for several weeks during the war rush and all day Saturday and Sunday, regularly making a day of 12 hours and 40 minutes or a week of 88 hours and 40 minutes. This girl was over 18 years of age, so that her employment for these hours was legal.

Another girl in the same establishment had been working 10 hours a day since February, and seven days a week with the exception of every third Sunday when she was free. One girl employed by a machine company said she worked from 7 a. m. to 8 p. m. the first day of the week, until 8.30 the next night, and until 9 o'clock the rest of the week. Deducting one-half hour for lunch and supper, this made a total of 79½ hours for the week. Neither the manager of this establishment nor of the former one was able to say how many girls were employed who were under 18. In another factory having contracts for munitions the girls worked during several months for 11 hours and 15 minutes a day, 64½ hours a week. On leaving the factory they had to travel to town on the street car, which took 40 minutes, and then transfer to cars which took them home.

In a printing office it was reported that women worked three hours overtime about a fourth of the time, printing reports for the State government, making their working day 11 hours. In the railroad yards one woman worked from 6 p. m. to 6 a. m. cleaning cars, and in another place women worked in the yards cleaning cars from 6 p. m. to 6 a. m., 72 hours a week, no specified time being allowed for lunch. Women in another department worked 12 hours a day, 7 days a week. In a casket company's factory that had normally a 59-hour week the girls worked during the influenza epidemic Saturday nights until 10 o'clock and all day Sunday, making a 75-hour week for about three weeks.

DANGERS OF LONG HOURS.

Long hours for the workers have been recognized by the Supreme Court of the United States as a serious menace to the welfare of the State. In the brief presented to the court in the case of *Bunting v. Oregon*, which led to a decision declaring constitutional an Oregon law limiting hours of work, the world's experience, upon which

legislation limiting hours of labor is based, is summarized as justifying this use of the police power under the Constitution. The following statements of fact show the physiological basis for defense of such laws:

The fundamental need of limiting excessive working hours is based on the physiological nature of man. For medical science has demonstrated that while fatigue is a normal phenomenon—the natural result of bodily and mental exertion—excessive fatigue or exhaustion is abnormal—the result of overexertion of work pursued beyond the capacities of the organism.

During activity, the products of chemical change increase. An overtired person is literally a poisoned person, poisoned by his own waste products. These wastes are poisonous impurities arising from the chemical processes of cellular life. They circulate in the blood, poisoning brain and nervous system, muscles, glands, and other organs until normally burned up by the oxygen brought by the blood, removed by the liver or kidneys, or eliminated through the lungs.¹

Recent investigations show that not only in the dangerous trades, but in all industries a permanent predisposition to disease and premature death exists in the common phenomenon of fatigue and exhaustion. This is a danger common to all workers, even under good working conditions, in practically all manufacturing industries, as distinguished from the specially hazardous occupations.

In ordinary factory work, where no special occupational diseases threaten, fatigue in itself constitutes the most imminent danger to the health of the workers because, if unrepaired, it undermines vitality and thus lays the foundations for many diseases.²

The experience of manufacturing countries has illustrated the evil effect of overwork upon the general welfare. Health is the foundation of the State. No Nation can progress if its workers are crippled by continuous overexertion. The loss of human energy, due to excessive working hours, is a national loss, and must inevitably result in lowering the Nation's prosperity.³

The women who are working in Indiana are engaged in a great variety of occupations in which are present many different kinds of strains increasing the dangers to which they are already exposed by long hours of work.

In a study of the occupations in which women were engaged in the 112 establishments visited, the strain of continuous standing at machines or work tables was noticed by inspectors in 61, or more than half the places of employment. In addition to continuous standing other strains in the occupation itself, such as lifting heavy weights running very fast machines, running machines which are not guarded, so that constant and close attention must be given to the work, and operating levers and foot pedals which require considerable strength to manipulate, were noted in 43 establishments.

OUTPUT IN RELATION TO HOURS.

Apart from the physiological effects, a measure of fatigue can be found in a worker's output. Output is a test of fatigue, as it is the sum of the results of activity which show themselves in a diminished capacity for doing work. Statistics showing comparative output under different schedules of hours have been difficult to secure because establishments have not kept records full enough to afford a basis for conclusion. But taken in conjunction with the experience of establishments in our own and other countries, these few opinions and figures secured in Indiana indicate that the value of shorter hours is shown not only in the health of the workers but also in the steadiness of output.

¹ Supreme Court of the United States, October Term, 1915, *Bunting v. Oregon*, Brief for defendant in Error, vol. 1, p. 265.

² *Ibid.*, pp. 63 and 64.

³ *Ibid.*, p. 249.

In one establishment a manufacturer found that a girl on a milling machine turned out 426 bolts in eight hours, the normal day. For two weeks she worked 10 hours a day and her output was 480 in 10 hours. Thus, her output was $53\frac{1}{2}$ pieces per hour in an 8 hour day and 48 pieces per hour in a 10 hour day. Another girl on hand work turned out 59.2 pieces in 41.6 hours in a week, and only 52.3 pieces in 46.9 hours.

The manager of another factory said, "If you have overtime you pay for it. When girls work three nights a week until 9 o'clock there is a noticeable falling off in output after the first week of overtime." One establishment kept a record of time lost, and found that when overtime was worked many more hours were lost through irregularity of attendance than the number of hours added through overtime.

As one manager in an Indiana factory said, "I gave my girls a Saturday half holiday. My output was the same. Then I changed from 10 to 9 hours a day because business was slack, and after 5 weeks the output was again equal to the old 10-hour day." Another firm has kept record of output of the same girl on the same job by day and week. When she worked 47.9 hours a week her output was 59.2 and her productive efficiency rated at 123.8. When this same girl worked 7.5 hours a week longer, or 55.4 hours, her output was 4.1 less, or 55.1, and her productive efficiency was lowered from 123.8 to 96. A similar experience is shown in the report of the British Ministry of Munitions in which it is stated that "for women engaged in moderately heavy lathe work a 50-hour week yields as good an output as a 66-hour week, and a considerably better one than a 77-hour week."¹

THE LAWS OF OTHER STATES.

The experience thus indicated has led the majority of the States of the Union to enact laws limiting the hours of women's employment, and the constitutionality of these statutes has been upheld not only by State courts but by the Supreme Court of the United States. The accompanying maps relating to hours of work show that only six States have no limitation on the length of the working day of adult women—Indiana, Iowa, West Virginia, Alabama, Florida, and New Mexico. The largest manufacturing States, such as New York, Pennsylvania, and Massachusetts, have had legislation thus protecting women for many years. Twenty States limit the daily hours to eight or nine.

WORKING CONDITIONS.

Second in importance only to the hours which women work are the conditions which surround them while they are at work, and adjustments of machinery to insure safety and reasonable comfort. Certain standards for these conditions are accepted as being necessary for the health and efficiency of women workers.

In some States they are clearly defined in the law, while in others they are regulated by an industrial commission which is given power to define and enforce industrial codes dealing with such subjects. In Indiana the law is vague in a number of points and the industrial

¹ Ministry of Munitions, Health of Munitions Workers Committee, Memorandum No. 18, p. 4, London, 1917.

board has powers of enforcement but not of definition of standards in the form of codes, and this renders enforcement difficult and uneven, since it rests so largely with individual inspectors.

In some establishments in Indiana the service facilities for women employees are excellent. Modern, sanitary plumbing, clean, well-ventilated wash rooms, and cheerful, comfortably furnished restrooms and lunch rooms have frequently been found. That this kind of equipment is a great benefit to the morale of the employees, increases health and reduces labor turnover, is the testimony of Indiana employers. On the other hand, in a considerable number of establishments these facilities were either totally lacking or wholly inadequate. Our inspector visited two establishments handling food products. It would seem that for those who are engaged in preparing a product which is so intimately connected with the public welfare there should be some standard minimum of sanitary requirements. But this is not the case in Indiana. One of these two factories was reported by the inspector as follows:

Small rest room and coat room boxed off from the packing room by a low wooden partition. Warm and stuffy. Two chairs. One small toilet room partitioned off by a wooden partition. No outside ventilation. Rather dirty and messy. No evidence of washing facilities anywhere. Cloaks hung on nails around walls of small rest room. No drinking facilities observed.

In marked contrast was the report of the inspector on the other food factory:

On the second floor the wash room and toilet opened off the cloakroom. They were very clean and well kept by the matron in charge, who took pride in showing the room. Cloakrooms were clean. Wraps were hung on racks. Girls put their hats on shelves above their cloaks. All hooks on racks were numbered and each girl given her number.

As marked a difference in service facilities is often seen inside of one factory. In one department the women may have the most up-to-date equipment for their comfort and welfare, whereas in another department they may work in a basement with no natural light or sunshine, dirty and antiquated plumbing, and no place to rest. There is surely a great need for the establishment of standards in these matters for all establishments in the State and for the rigorous enforcement.

The factory inspection law of Indiana, passed in 1899, provides that "a suitable and proper wash room and water-closets shall be provided, * * * and such water-closets shall be properly screened and ventilated and be kept at all times in a clean condition, with not less than one seat for each 25 persons, and one seat for each fraction thereof above 10 employed in such establishment; and if women and girls are employed in any such establishment, the water-closets used by them shall have separate approaches and be separate and apart from those used by the men."

This provision does not define the meaning of "suitable" and "proper," and is, therefore, not a guide to employers in determining in advance the type and arrangement of such facilities as will conform to legal requirements. Similarly it gives no clear instructions to factory inspectors as to the orders which they are justified in issuing in the course of their inspections. As illustrating the difficulties of inspection under such circumstances, the investigators who visited 48 factories in Indianapolis found only two clear violations

of law in toilet accommodations. On the other hand, they considered it reasonable to recommend improvements in toilet accommodations in 31 of these factories. On the whole subject of sanitation and comfort they found only 7 clear violations of the present law in 112 establishments visited, but 215 recommendations were made for reasonable improvements in these same plants.

In some factories the toilets were clean and adequate in number and in conformity with the law; others were not provided with doors or any kind of screening. In addition to this, five, six, and sometimes eight connected toilets were found provided with a single automatic flushing device which operated every 15 or 18 minutes. The toilets in one factory were dark and unventilated, although outside ventilation had been ordered five months earlier by the industrial inspector. Many of the toilets in other establishments were found to have no outside ventilation, with partitions which did not reach to the ceiling, so that the only ventilation was through the work room.

In some shops the girls were required to take care of the cleaning themselves; in some others a man was supposed to do this work. In one establishment where there were five toilets in a row without doors in front of them, the cleaning was done by a man. Women's toilets were sometimes found adjoining the men's toilets and separated from them by a partition which did not reach to the ceiling.

In one plant working on a munitions contract, it was found that the toilet accommodations were so inadequate that only one installation was provided for 128 girls. In another establishment, a women's toilet with only eight seats was used by 600 women all summer. This condition was a direct violation of the law, which provided that one toilet shall be provided for every 25 women, and an additional one for every fraction thereof above 10.

WASHING FACILITIES AND DRINKING WATER.

The standard for washing facilities and drinking water has been recommended by the Women in Industry Service of the United States Department of Labor as follows:

Washing facilities with hot and cold water, soap, and individual towels should be provided in sufficient number and in accessible locations to make washing before meals and at the close of workday convenient. Drinking water should be cool and accessible, with individual drinking cups or bubble fountains provided.

In Indianapolis the investigators considered the washing facilities inadequate in 42 out of 112 establishments visited. Provisions for drinking water were unsatisfactory in 24 of them.

One tin basin was all that was provided for eight girls in one establishment. When the investigator visited it early in the day, the water, which was all that could be obtained for that day, was already soapy and dirty. No towels were supplied. In another establishment, where food products were prepared and packed, 45 women were employed in one room trimming meat. Their washing accommodations consisted of one basin, no soap or towels, and no hot water. In several food factories, no soap or towels were provided for the girls. In one bakery which employed 32 girls—who handled all the cakes made in that establishment—only one

sink was provided for washing, no soap at all was supplied, and the girls had to wipe their hands on a dirty roller towel, which was changed only once a week.

An uncorked earthen molasses jug filled every morning with a dirty glass in front of it, supplied all the drinking water in one establishment. In another establishment drinking water was supplied from a wooden bucket. The supervisor of women in this plant said that she thought the bucket was kept covered by a piece of wood and that each girl had her own glass. A faucet with a tin cup was the extent of the drinking accommodations in several factories. In a big establishment where food products were canned, tin cups were found chained to the wall beside large water tanks in several workrooms.

The Indiana law covered such conditions as these merely by saying that "a suitable and proper washroom" shall be provided. Here again is ample evidence of the great need for a definite code on this subject and increased machinery for its enforcement.

DRESSING ROOMS, LUNCH ROOMS, AND REST ROOMS.

The Indiana law requires that "a dressing room shall be provided for women and girls, when required by the chief inspector." The standard which is advocated by the Woman in Industry Service of the United States Department of Labor, is that "Dressing rooms shall be provided adjacent to washing facilities, making possible change of clothing outside the workrooms. Rest rooms should be provided."

Recommendations for improvements in dressing rooms were made in 50 of the 112 establishments visited, and for improvements in, or installation of, rest rooms and lunch rooms in 33 plants. In a cord factory the girls in one department hung their wraps on nails in the sewing room. The lint from the waste material in the spinning room blew over the partition and settled on the wraps. Nails on the walls of the toilet room on the second floor were used by the girls on that floor. In many factories the girls hung their outdoor clothing on the walls of the workshops. In others, racks were provided for their clothes in the toilet rooms. As the toilets were often not screened or ventilated, this arrangement was most unsatisfactory. One girl said she liked to hang her wraps in the workroom because she could "keep her eye on them better." Individual lockers with keys have been installed in some establishments.

In one establishment where 25 girls were employed running lathes and doing other machine work there was no lunch room or rest room and the girls were obliged to eat their midday meal in the machine shop. In a printing office which employed 35 girls the only accommodation that was offered for lunch was a gas burner in one corner of the workroom where the girls could heat their own coffee. In another establishment which employed women, the sole equipment of the lunch room, which was the only place the girls could use for resting or eating, was a few chairs with legs or backs broken, which were also used as racks for outdoor wraps, sufficient hooks not being provided elsewhere. In an automobile-tire factory, 300 girls ate their lunch at the work tables, as no lunch room or rest room was provided. To rest during the noon hour they stretched

themselves out on the pads of booked rubber in the workroom. In one laundry visited tired girls were allowed to lie on the tables in the workroom during the lunch period.

The women in some of these establishments were working 10 hours or more every day except Saturday and Sunday. They needed some place where they could rest during the noon hour and where they could get a nourishing lunch or eat in pleasant surroundings the meal which they had brought with them, and they needed a dressing room where they could change their working clothes for outdoor apparel.

One manager of a large mill in Indianapolis had recently installed an attractive cafeteria with space for dancing, and, on the floor below, shower baths and individual lockers for his women employees. He said to one of the inspectors that he expected his cafeteria to cost him several thousand dollars a year over his receipts from it, but that he believed that it paid through increased efficiency of his workers and the decreased labor turnover.

POSTURE AT WORK.

One of the methods of relieving fatigue of women workers and of improving their general health and efficiency is to provide seats for their use while at work. It is generally accepted that continuous standing is particularly injurious to women, yet the Indiana law contains no real provision on this subject except in the child-labor law, which states that girls under the age of 18 years shall not be employed in any capacity where such employment compels them to stand continuously. The factory-inspection law has a clause which requires that "the employer of such women and girls shall provide a suitable seat for the use of each female employee, placed conveniently where she works, and shall permit the use of the same when she is not necessarily engaged in the active duties for which she is employed." The last clause permits employment in which continuous standing is the practice. Girls are standing all day in the work of inspection and finishing in many factories throughout the State, when an intelligently adjusted seat would permit them to vary their position occasionally from standing to sitting. Girls in one establishment working on lathes where the operation took several minutes were not provided with seats because the machines had been put too close together to make room for a chair or stool.

Even in processes in which the women sit at work, it is a common thing in factories throughout the State to see them sitting not on "suitable" seats but on old boxes with wooden slats nailed to them to serve as backs. An elderly woman in a food-products canning company peeled onions all day. Her only seat was a pile of onions which she had heaped up to give herself some support. For those women who are doing their work seated on boxes and other insufficient support, it is clearly within the provision of the law in Indiana to require that they be provided with suitable seats.

PRECAUTIONS AGAINST ACCIDENTS.

Statistics of accidents to women in industrial establishments in Indiana in 1917 and 1918, prepared by the secretary of the State industrial board of Indiana, showed 502 accidents in 1918 as com-

pared with 404 in 1917, or an increase of over 24 per cent. It was stated that part of the increase was due to injuries to hands and fingers in the operation of punch presses in the metal trades, in which the number of women increased during the war. These reports of accidents were received by the board in connection with the administration of the State compensation law, requiring payment of compensation for disability lasting longer than seven days. Doubtless less serious accidents are often not reported.

The Indiana law provides for "adequate" guards for machinery, and in many factories the law has been conscientiously followed, but the number of serious accidents reported, and minor ones probably not reported, show the need of greater care to insure safety, especially through a larger force of inspectors. Girls were found working at emery wheels polishing metal parts in a shower of sparks and emery dust from which they were not protected either by hoods for the wheels or gloves and goggles for themselves. Girls who were daily turning out hundreds of small metal cones from large punch presses, working at great speed, placed the cones under the presses with their fingers. In several shops it was noticed that there was no protective device on these machines to prevent the release of the press while the operator's fingers were under it. That such protection can be given was shown in other machine shops where automatic protective devices had been installed, reducing accidents to a minimum. Unprotected belts and pulleys were another great source of accident in the factories in Indiana. In one shop at the side of an aisle not more than $3\frac{1}{2}$ feet wide, was a totally unprotected belt running very fast. In another factory, the belts operating the machines on each side of a narrow aisle met at an angle not more than seven feet above the center of the aisle. A person walking down this aisle had to keep directly in the middle to avoid hitting the belt on one side or the other.

In a machine shop a young girl was operating a lathe which sent a shower of hot steel shavings all around her. She wore no goggles to protect her eyes, nor had there been any attempt to place a shield around the lathe to catch those dangerous particles. In one factory a girl was interviewed who said she had been working all the time on an emery wheel at what she called "amber filing." "There is a little hood over the emery wheel," she said, "but the dust is awful. Most of the emery wheels you pour water on or something, but not this kind. It was just dry dust. It does not make me feel bad, but I am a sight by night, hair and face covered with black dust." It is a well-recognized fact that breathing emery dust is very harmful to the lungs and is likely to result in tuberculosis or other respiratory diseases. This machine could have been fitted with a proper ventilating hood, which would have removed the chief dangers.

THE NEED FOR NEW LEGISLATION.

The facts revealed even in this brief inquiry show that without State action women workers are subjected to the fatigue of long hours, which are clearly detrimental to their health and efficiency. Without clearer definitions of standards of comfort, safety, and sanitation in the workrooms, working conditions are often allowed to exist which

is the need for an adequate inspection force and for a plan of administration which shall give recognition to the urgent problems of women in industry. It is for the people of Indiana to determine the form and content of legislation to accomplish these purposes. It may be appropriate, however, to outline the tests of adequacy in such laws which experience has revealed in Indiana and in other States.

1. A clear definition of occupations covered is essential as a means of enforcement, unless it is deemed wise to include all gainful employment under the law.

2. Regulation of hours of work requires a statement of (a) the length of the maximum working day permitted, (b) the length of the working week, and (c) limitation of employment to six days in a week. Without a clear limitation on the length of the day, the total weekly hours permitted might be required in so brief a portion of the week as to result in exceedingly long daily hours. Without a limitation on the total weekly hours, and on the number of days of employment in a week, a day of rest is not assured and weekly hours may be therefore excessive. Moreover all three restrictions are necessary for effective enforcement.

3. A period of rest at night should be assured both to prevent employment all night, and to make more possible the enforcement of the daily limitation of hours, by naming a closing hour after which presence in the establishment is a violation of law regardless of the length of employment.

4. A definite requirement should be made for a sufficiently long recess at noon and for a limitation on the maximum hours of continuous employment, as otherwise the strain and speed of modern industry may result in continuous work, without the necessary provision of time for food and rest before fatigue results in exhaustion from which recovery is difficult.

5. Provision for comfort and sanitation should be so definite as to leave no doubt in the minds of employers, workers, and inspectors as to their application in any plant.

6. Because of the complexity of industrial conditions, and, especially the differences between different industries, the administrative authorities should have authority to build up codes of regulations for these different occupations, basing them always upon the minimum standards of health and safety which are found to be common to all occupations.

7. It has been found that enforcement of the laws limiting hours of labor is greatly facilitated by the requirement that in each workroom a printed notice be posted stating the exact hours of work required of the women employed there. Employment of any woman at a time other than that stated in the notice is deemed a violation of law. In addition to the posted notice it is also desirable to require the keeping of a time book with records of the actual daily hours of each woman employed, since the hours for individuals often differ from those of the department as a whole. These two forms of records provide a means of enforcement depending upon inspection and not upon the testimony of workers. Fear of losing a position makes workers always unwilling to testify in court against their employers, and this has resulted in difficulties out of which have come the suggestions for requiring records to be available as evidence.

8. An effective labor law must contain, also, a clause defining penalties for violation.

9. Public opinion should demand that employers be prosecuted for violations of law and that appropriate sentences be imposed upon those who are convicted in court. Vigilance in requiring compliance with the laws on the statute books is essential if the labor legislation of the State is to be an effective agency for establishing proper conditions of employment.

10. It should be said, however, that prosecution is only one means of insuring compliance with the law. It is only when employers have become so enlightened and progressive as to accept the standards imposed by the State as the basis for efficiency in industry to be adopted willingly and not through the compulsion of threatened punishment that a satisfactory condition can be said to prevail. When this is achieved the inspectors of the State department of labor become advisors in the application of standards rather than policemen. The test of achievement in this respect, however, is to be found not in the absence of prosecutions, but in the actual conditions existing in the industries of a State. It is fair to assume always that the effectiveness of the laws enacted and of their administration is to be found in the actual hours and working conditions found in the industries.

11. With the growing complexity of the problems of women's employment and with the increase in their numbers in industry it becomes important that State departments of labor should be equipped not merely to enforce laws regulating their employment, but to study their needs and to observe new conditions. To accomplish this task it is necessary that women should be in responsible positions, as members of industrial boards or as chiefs of divisions directly responsible to the boards or to the labor commissioner. This is important not merely to represent the interests of women workers, but to add the wisdom of new points of view to the labor department in dealing with all the problems of labor affecting, as they do, both men and women.

12. Measured by these tests the Indiana law has both strong and weak points. Indiana has, for instance, a prohibition of night work, applying to manufacturing; a prescribed lunch period of one hour, with a requirement for posting the written permit if a shorter period is allowed; provisions relating to comfort and sanitation; and a law limiting the daily and weekly hours of labor of girls under 18 years of age, with provision for posting a notice of the hours of labor required of them. But Indiana does not prohibit night work in any occupation other than manufacturing; does not define explicitly enough the standards of comfort and sanitation which should be established; does not insure one day of rest in seven for girls under 18, nor does it require the keeping of a time book with the exact record of the working time of the girls to whom the law limiting hours of work applies. Most important of all, the Indiana law does not limit the daily or weekly hours of employment of adult women in any occupation; only two women have been appointed in the inspection force and women are not represented on the industrial board. It is clearly important, therefore, in the interest of progress in labor legislation that action should be taken on the recommendations of the governor in his message of 1919, "that a law be passed making permanent the women's division in the inspection department, regulating the hours and safeguarding the working conditions of women in industry."