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UNITED STATES DEPARTMENT OF LABOR
WOMEN'S BUREAU
Bulletin No. 141

PIECEWORK IN THE SILK-DRESS
INDUSTRY

EARNINGS, HOURS, AND
PRODUCTION

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PIECEWORK IN THE SILK-DRESS
INDUSTRY

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PRODUCTION

By
ETHEL L. BEST



BULLETIN OF THE WOMEN'S BUREAU, No. 141

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LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, April 23, 1936.

MADAM: I have the honor to transmit a report dealing with earnings, piece prices, and production of pieceworkers in the silk-dress industry.

The object of the study was to ascertain the effect of a minimum weekly wage on pieceworkers, together with production variations under uniform hours in various dress centers.

The survey was conducted and the report written by Ethel L. Best, industrial supervisor. Arcadia N. Phillips, statistician, supervised the statistical work.

Respectfully submitted.

MARY ANDERSON, *Director.*

Hon. FRANCES PERKINS,
Secretary of Labor.

PIECEWORK IN THE SILK-DRESS INDUSTRY: EARNINGS, HOURS, AND PRODUCTION

INTRODUCTION

The garment industry is a fairly recent development of the machine age. Just as the making of cloth was transferred from the home to the factory with the invention of steam-operated machinery, which made possible the use of the spinning jenny and the power-driven loom, so the invention of the power-driven sewing machine transformed the making up of cloth into garments—formerly a home industry, with the dress made by hand or by a foot-powered machine—into a factory industry.

The dress industry, which is a division of the garment industry and the one to which this present study is confined, is only about 30 years old, one of the youngest industries of the country. The code for this industry included the manufacture of women's, misses', and children's dresses but did not include what are commonly known as house dresses or cotton wash dresses. There are no figures either in the inquiry as to occupations in the decennial census of population or in the biennial census of manufactures that give a picture of the importance of the manufacture of women's dresses in the United States. Some indication of its importance, however, is the fact that in 1929 the value of women's, misses', and children's dresses and ensembles was well over one-half the total value of women's clothing and that the group as a whole was the thirteenth largest industry in point of number of wage earners, ranking eighth in value of products.¹

Figures furnished by the International Ladies Garment Workers and manufacturers' associations and quoted in N. R. A.'s Work Materials Bulletin No. 44 give the number of dress concerns in metropolitan New York in 1935 as 3,300, with over 100,000 of the wage earners in this area.

The reasons given for the predominance of the New York City area over the rest of the country are as follows: It is the leading style center; there is an adequate supply of skilled labor; transportation facilities are of the best; adequate financing is available; and the fabric market is nearby. In addition to these is the fact that the volume being so much greater in New York than in other cities allows faster production, which in turn reduces the cost of overhead. Of all dresses sold throughout the country practically 80 percent are made and sold in New York City, leaving only a little over one-fifth for distribution by the rest of the country.

In New York has developed, more than in any other part of the country, the system of production known as the jobber-contractor system, by which jobbers and wholesalers who sell directly to retailers

¹ U. S. Bureau of the Census. Fifteenth Census, 1930: Manufactures. 1929, vol. II, p. 378.



A WORKROOM IN THE LADIES' DRESS INDUSTRY.

(Furnished through the courtesy of the Joint Board of the Dressmakers' Union.)

and decide on designs and styles contract with shops for the actual making of the dresses. It is estimated that about 80 percent of the dresses manufactured in New York City are produced under this system.

The jobber usually furnishes to the contractor or submanufacturer the materials, trimmings, and so forth, along with the styles to be followed. For low-priced dresses most jobbers employ cutters on their own premises to cut out the garments before they are sent to the contractor for making up.

The factories of many of the contractors are in and around New York City and in the nearby States of New Jersey, Connecticut, and Pennsylvania, where material can be trucked easily to the plant and the finished garments returned to the jobber. The contractor is paid so much a garment for the making, and out of the amount received must come the wages of his workers, overhead costs, and his own profits. Naturally, when prices of the garments are set too low, wages suffer and profits disappear. To prevent this exploitation of the worker and the contractor by the jobber, there was special provision in the union agreement and later in the code specifying the same wage minimum in the contract shops as in those of the manufacturer producing his own garment, with an added amount for overhead.

In the dress industry as in many others the development in transportation facilities during the past 20 years has changed the character and the competing area. Work can be shipped by truck to a neighboring town or village and returned in little more time than from another shop in the same city. Factories in widely separated areas compete in the same markets, and though New York City, as has been stated, is the principal manufacturing center, Boston, Philadelphia, Baltimore, Cleveland, Chicago, St. Louis, Los Angeles, and San Francisco produce the identical or similar models and frequently sell to the same retail establishments. Shops making dresses that wholesale up to \$12.75 are found in most of the centers outside of New York, but the more expensive dresses, with the exception of those that are custom made, are confined very largely to New York City.

The dress-manufacturing industry is far more dependent on the experience and skill of the workers than are most large producing industries. There are no automatic machines that cut, make, or press dresses. Therefore, on the character of the labor in a given area depends the success or failure of the industry in that locality. New York City, the oldest and largest center, naturally has the most skilled workers. Many of these workers were recruited in the early days from Russia and Italy, having plied their respective crafts in their own countries. Their descendents have been brought up in the industry. An experienced operator will have her "helper", possibly her daughter, who will assist her and at the same time learn the trade; or the helper may have learned to run a power machine in her home before coming to the factory. A head presser may have several assistants that he trains and for whom he is responsible, and these are paid from his wages. Though this system is not so generally practiced now as formerly, the results are still apparent in the large number of skilled workers in New York City.

In other parts of the country there is complaint of the lack of experienced workers and of the cost of training. In the far West

Mexican workers are entering the industry, and in the eastern cities Cubans, Portuguese, Spaniards, and Greeks are replacing the older immigrants. It is claimed by the industry that workers of this new type are slower to learn and require a longer time to attain a responsible degree of efficiency; but until more is known of their previous experience and the methods used in teaching them, it would seem impossible to make a fair comparison.

SCOPE AND METHOD

When the Dress Manufacturing Code was approved in the fall of 1933, and later when amendments were added, certain labor provisions were included. These provisions were the same in many centers as had been established previously by the union agreement, for the most part in late August 1933. They included a 35-hour work-week; a minimum rate for the hourly earnings of operators, pressers, and finishers (the groups considered in this report) according to locality; and the total nonemployment of minors under 16 years of age, and of persons under 18 years on hazardous work. Certain difficulties arose in the application of these standards, more especially where wages were concerned. To some extent the code made the wholesale price of the dress the basis for rate fixing, more experience and skill being required to make the higher-priced garments. It allowed somewhat lower hourly minima for the employees making the low-priced dresses of \$3.75 and less than for those making dresses to wholesale at over \$3.75.

The minimum hourly rate for operators in New York City on low-priced dresses was 75 cents, and on dresses above \$3.75 it was 90 cents. Minimum rates for other centers were based on those for New York, except that a specific rate was set for low-priced garments in the Eastern Area.²

In Philadelphia and Boston the minimum hourly rate for operators on dresses of \$3.75 and less was set at 90 percent of that in New York; in the Eastern Area it was fixed at 63 cents, which is 84 percent of New York's minimum rate; in Chicago and Cleveland, at 85 percent of New York's rate; and in St. Paul and Minneapolis, St. Louis, and Los Angeles, at 70 percent.

The same relation to New York rates was fixed in the rates for operators on the higher-priced dresses, except that the Eastern Area was allowed 90 percent of the rate set for New York.

For pressers in New York City the code minimum was 85 cents an hour for the less expensive dresses and \$1 for those higher priced. The differentials for other centers were the same as those already quoted for operators, except that in the Eastern Area, on the lower-priced dresses, 70 cents (only 82.4 percent of the New York minimum) was allowed.

For finishers in New York City the code minimum for dresses wholesaling at \$3.75 and less was 57 cents an hour; for the higher-priced garments it was 65 cents an hour. The same differentials as for operators and pressers were allowed the other centers, except that finishers on low-priced dresses in the Eastern Area were to be paid not less than 50 cents an hour, which was 87.7 percent of New York City's rate.

²Includes towns and cities near New York City, whether in New York State, in New Jersey, or in Connecticut.

In order that comparisons between different cities should be based on garments of the same wholesale price, no shops were included in the present study where the major product wholesaled at more than \$12.75. However, in most cities the factories in the wholesale-price groups of over \$3.75 and up to \$12.75 were so few that it was impossible to make a comparison between cities except by combining them in a single group, over \$3.75 and including \$12.75. So, with the one exception of New York City, where groups can be further subdivided, the facts and figures in the following report are shown for only two groups, dresses wholesaling at \$3.75 and less, and dresses wholesaling at over \$3.75 and including \$12.75.

Information was secured in nine centers—New York City, the Eastern Area (including the suburbs of New York, New Jersey, and Connecticut), Boston, Philadelphia, Cleveland, Chicago, St. Louis, St. Paul and Minneapolis, and Los Angeles—on the manufacture of dresses wholesaling at \$12.75 and less. Shops were selected for study whose principal product was silk and rayon dresses. In a few plants cotton dresses were made during seasons of the year when work on silk dresses was slack, but records of these firms were taken for only the silk season.

Pay-roll records were obtained, including week's earnings and hours worked whenever available, for a 4-week period in the spring of 1933 before the union agreement or the code had been established, and for a 4-week period—for the most part in the fall or winter—after the new hour and wage provisions of the agreement had become effective.

Only those plants were included that had operated the full schedule of hours during the period taken or that had kept a record of actual hours worked.

Production records for individual workers usually were obtained from books kept by the workers themselves. In most plants each worker paid by the piece kept a book with a record of output and the piece price of each garment. In some cases, but not many, records taken from slips or tickets turned in by the workers were kept in books of the firm. When this was the practice, the tickets were destroyed after payment had been accepted, so, unless production as well as earnings was entered, figures on output were not available.

Piece prices paid during the period taken were reported by the management. Where possible these were checked with the records kept by the worker.

There are several principal operations in the manufacturing of silk dresses. Some are performed almost exclusively by men, others by women, while in still others both men and women are employed. When the pay is on a piece basis there is no difference in the rate whether the operation is performed by men or by women.

The cutting of the dress is nearly always done by men and usually is paid on a time basis. It requires skill and experience to cut the cloth to the best advantage and not waste the material, and the loss from spoiled materials if mistakes were made would more than offset a possible increase in the rate of production if the work were paid on a piece basis.

As a rule, the operator or maker in the silk-dress industry makes the entire garment. Occasionally a factory will be found operating under the sectional method; that is, where the work on each dress is divided, one operator sewing up the seams, another making the

sleeves, another inserting them, and still another doing the work on the neck. In other words, the dress is divided into sections and each operator works on only one part. This method is the general practice in the making of cotton dresses but it is rarely found in the silk-dress industry, and no factory operating under this method was included in the present study.

Among the reasons why the entire garment in the silk industry is made by a single operator or worker is the wide variety of styles, with frequently only a few dresses in each lot, so that to set a piece price on each section of the garment would be both laborious and expensive. Further, when imperfections are found in a dress made by a single worker there can be no dispute as to the one responsible.

To make a dress requires skill and experience, and to become a skilled operator requires about 2 years' training. The operator must be able to take a model and follow it accurately and quickly; she must know how to make the different parts of a dress and handle various materials—silk, wool, rayon, and chiffons. She may be called on to bargain with the management concerning the proper piece price of a new model, and to do so she must be able to determine by looking at the dress the approximate time it will take to make it. Naturally there is much chance for error in this method of setting the piece price on a new model. If it is set too low, the workers will lose money before it can be adjusted; if it is set too high, the manufacturer will lose money or will find the garment priced too high to sell. An effort has been made by the International Ladies Garment Workers' Union to arrive at a more scientific method of setting rates than by bargaining. They hired an engineer to work out, together with the union, a system whereby the average time to make the principal parts of a dress might be determined, additional time being allowed for extras and for more fancy work. The piece price could then be fixed with some degree of accuracy for the principal parts and bargaining be limited to a much narrower range. How far this newer and more scientific setting of rates can be introduced depends on educational work, as many employers and employees cling to the old way of price setting, finding it hard to change to a new and untried method.

Pressing the finished garment is usually done by men, though in a few shops Negro women are employed. The work requires considerable strength, is hot, and involves continuous standing. A good presser must be careful and quick, and usually an experience of at least 6 months is required.

The finishing of the dress is done by women; and they, like the operators and pressers, are usually paid on a piecework basis, the price depending on the amount of work on the dress rather than the price of the garment. Generally, however, a cheaper dress will have fewer snaps, bows, or buckles to be sewed on than a more expensive and elaborate garment, and therefore the finishers will earn less. Not so much skill is required in this work as in making the dress, but speed is essential in order that a finisher shall make a fair week's pay. This requires practice; so in finishing, as in the work that requires more skill, the new worker is at a disadvantage. Before the dress is sent out it is carefully inspected to see that the work has been properly done and that the dress is in good condition. The importance of this work depends to a considerable extent on the price of the garment. In the more expensive lines the examining is much

more carefully done, as the need for perfect work is greater than in the less expensive dresses. Frequently the work of finishing is paid for on a time basis to prevent undue haste and careless inspection.

Other occupations, such as cleaning, hemming, tucking, and sample making, were found to be paid on a time basis, and in all but the large shops workers usually were employed on more than one occupation. Finishers (when paid by time worked) often did the cleaning and inspecting, and machine operators often did the hemming and tucking.

The movement for organization of the workers has been strong, though conditions in the industry such as the contract system have made unionization difficult and have had their effects on the number of workers organized from year to year. Nevertheless, the advantages of the union to the workers in this industry have been marked, the most recent example being the agreement effected in the late summer of 1933 as to wages and hours, which later was incorporated in the dress code.

When a change is made in the method of work, in the hours, or in the rate of pay, the worker usually judges such change by the amount in the envelope at the end of the week. The living conditions for the worker and his family are dependent to a large extent on his earnings, and it follows naturally that any change that increases earnings is apt to be regarded favorably and any that involves a decrease, unfavorably. Some years ago the Women's Bureau made a study of a shortening of hours in a certain factory with special reference to the workers' reaction to the change. In the great majority of cases the change to shorter hours was regarded unfavorably because, hourly rates remaining the same, earnings were less under the shorter hours. In another plant, where hours were also shortened but where the hourly rates were increased, the reaction to the change was largely favorable. In the silk-dress industry the change effected through the union agreement and the code was so generally favorable to the workers, through shorter hours and higher rates of pay, that to ask how they viewed the change would have been superfluous. In all the centers included in this study the earnings for pieceworkers were higher after the change than before regardless of the shorter workweek. It must be remembered that the earnings in both periods were taken in busy seasons and are not indicative of other weeks throughout the year. In the dress industry the volume of work varies markedly in different months of the year, and in many establishments it was impossible to find more than a few weeks in the spring and in the fall when full time was worked and there was enough volume to keep the workers busy. The work performed by the pieceworkers differs considerably, both in kind and in personnel, so that operators, finishers, and pressers will be discussed separately in this report.

SUMMARY OF SURVEY

Numbers.

Three hundred and five establishments, employing 2,671 men and 10,957 women, were included in the study. The proportion of women was highest in the Eastern Area (environs of New York City) and lowest in Philadelphia. Between the two periods, that previous to the minimum-wage and maximum-hour provisions and that after, numbers increased in seven centers and decreased in two.

Hours.

Weekly hours before their limitation through union agreement and the code were 48 hours and over in not far from two-fifths of the shops.

These hours were worked by 6,000 workers, or 45 percent of all employees. A long-hour week was most frequently found in the Eastern Area. A short-hour week was most common in Boston and Cleveland. After the introduction of the 35-hour week, the decrease in hours ranged from 5 in some establishments to 29 in others.

OPERATORS

Earnings.

Dresses wholesaling at \$3.75 and less

After the change, the highest median weekly earnings (\$27.60) were found in New York, the lowest (\$15.50) in Boston. The median weekly earnings for the other centers after the change were:

St. Louis.....	\$19. 15
Philadelphia.....	19. 15
Eastern Area.....	19. 10
Chicago.....	18. 20

The increase in weekly earnings after the change was greatest in Philadelphia and least in Boston.

Median hourly earnings showed much greater increases than did weekly earnings. All but one city, Boston, had increases in hourly earnings of over 130 percent.

Dresses wholesaling at over \$3.75

The highest median of weekly earnings (\$34.75) after the introduction of minimum-wage and maximum-hour provisions was in New York.

The lowest (\$17.85) was in Los Angeles. The median weekly earnings for the other centers after the change were:

Philadelphia.....	\$28. 65
Cleveland.....	27. 35
Eastern Area.....	22. 75
Chicago.....	21. 75
Boston.....	19. 70
St. Louis.....	18. 50
St. Paul and Minneapolis.....	18. 20

The percent increase in the median of the weekly earnings after the change was greatest in Cleveland and least in Boston.

Median hourly earnings after the change more than doubled in six of the nine centers and increased over 150 percent in Cleveland and in the Eastern Area.

Production.

Dresses wholesaling at \$3.75 and less

The highest production after the change in hours and rates was in New York City, with a weekly average output of 68 dresses per operator.

A comparison of production before and after the change to a 35-hour weekly standard shows an increase in all centers but Chicago in the proportion of operators in the middle group, that is, those making

40 and less than 80 dresses a week. Accompanying this increased concentration was a decrease in all centers in the proportion producing 80 or more dresses, and an increase in those producing less than 40.

Dresses wholesaling at \$4.75 to \$8.75

The highest production after the change was in New York City, with an average weekly output for operators of 50 dresses a week. The lowest production was in Los Angeles, with a weekly average for operators of 21 dresses.

Dresses wholesaling at \$10.75 to \$12.75

The highest production after the change was in New York City, with a weekly average output of 35 dresses per operator. The lowest production was in St. Paul and Minneapolis, with a weekly average per operator of 18 dresses. The average output per operator was similar in the following centers:

	<i>Dresses</i>
Philadelphia.....	22
Cleveland.....	20
Boston.....	19
Chicago.....	19
St. Louis.....	19
Los Angeles.....	19
St. Paul and Minneapolis.....	18

Dresses wholesaling at over \$3.75

For the entire group making higher-priced dresses a comparison of production before and after the change to a 35-hour-week standard shows an increase in the proportion of workers producing from 20 to 40 dresses a week in five centers and a decrease in three.

In the high-production group of 40 dresses or more the proportion decreased in all the centers after the change. In the low-production group of less than 20 dresses, four centers showed decreases and four centers increases after the change to 35 hours.

Piece prices.

Dresses wholesaling at \$3.75 and less

Before the setting of a minimum-wage standard all the 111 shops reporting but 2 in the Eastern Area and 5 in St. Paul and Minneapolis had some piece prices for making a dress below 30 cents.

After the setting of a minimum-wage standard only 23 shops of the 111 reported any minimum piece prices set below 30 cents.

The maximum piece price set before the minimum-wage scale was introduced was 40 cents and over in 15 of the 111 shops.

After the minimum wage, 76 of the 111 shops had maximum piece prices of at least 40 cents.

Dresses wholesaling at over \$3.75

Before the setting of a minimum-wage standard, of 200 shops 77 reported minimum piece prices of less than 40 cents. After the setting of a minimum-wage standard only 10 of 200 shops reported minimum piece prices of less than 40 cents.

Previous to the setting of a minimum-wage standard, maximum piece prices of 75 cents or over were reported by 72 of 200 shops.

After the setting of a minimum wage, maximum piece prices of 75 cents and over were reported by 161 of the 200 shops.

Contract shops in New York City.

On the same priced garments earnings of operators were lower in contract than in inside shops. After the change in hours and rates there was less difference between these earnings than previous to the change.

The difference between median earnings in inside and contract shops even after the change was \$4.35 for operators on dresses wholesaling at \$3.75 and less and \$6.50 and \$4.65, respectively, for those on dresses in the two higher-priced divisions.

Before the change, the difference in medians for workers in inside and contract shops was from \$5.70 for those on dresses wholesaling at \$3.75 and less to \$10.80 for those on dresses wholesaling at \$4.75 and \$5.75.

PRESSERS

Earnings.

Dresses wholesaling at \$3.75 and less

After the change in hours and the establishment of a minimum wage, New York and the Eastern Area, the only two centers reporting, showed a weekly median for pressers of \$38.75 and \$23.55, respectively.

The increase in the median weekly earnings after the change was over twice as great for the Eastern Area as for New York City.

Percent increase New York.....	29.2
Percent increase Eastern Area.....	68.2

The median hourly earnings after the change were \$1.08 in New York City and 75 cents in the Eastern Area.

Median hourly earnings increased more than three-fifths in New York City and almost trebled in the Eastern Area.

Dresses wholesaling at over \$3.75

The highest median weekly earnings after the introduction of the minimum wage and uniform 35-hour week were in New York, \$47.75, and the lowest in Los Angeles, \$24.65. The increase in median earnings in the later over the earlier period was greatest in the Eastern Area, 69.6 percent, and least in Boston, 21.1 percent.

Median hourly earnings in a 35-hour week were highest in New York City, \$1.40, and lowest in Los Angeles, 81.9 cents.

The increases in hourly earnings after the change were from 45 percent in Boston to 138.9 percent in the Eastern Area.

Production.

Dresses wholesaling at \$3.75 and less

With a standard 35-hour week one-half of the pressers in New York and one-third of those in the Eastern Area produced 400 dresses or over a week.

Before the standardized week was introduced, two-fifths of the New York pressers averaged 600 dresses and more a week; in the Eastern Area 17.4 percent averaged so many.

Dresses wholesaling at over \$3.75

Of the four centers for which figures were obtained, production on the 35-hour week was highest in New York and lowest in Chicago.

The proportion of pressers whose average production before the change was less than 150 dresses was low in New York, 8.1 percent, and high in Chicago, 72.3 percent.

After the change 48.3 percent of pressers in New York averaged 250 dresses and over and in Chicago none averaged so many a week.

In the Eastern Area and Philadelphia, the two other centers reporting, the proportion of pressers in the high production group also decreased after the change.

Piece prices.*Dresses wholesaling at \$3.75 and less*

Before the introduction of a minimum-wage standard only 5 of 88 shops reported any maximum piece price of as much as 10 cents a garment.

After the setting of such a standard a maximum piece price of at least 10 cents a garment was reported in 42 shops and in 28 it was the minimum also.

Dresses wholesaling at over \$3.75

During the period before the change the maximum piece price for pressing a garment was below 20 cents in 95 of the 185 shops.

After the change a maximum of less than 20 cents a garment was found in only 38 shops, and in Boston, Cleveland, and Chicago there were no shops showing such a low maximum price.

FINISHERS**Earnings.***Dresses wholesaling at \$3.75 and less*

After the change to shorter hours and a minimum wage the median weekly earnings of finishers increased from \$11.35 to \$16.30 in New York and from \$6.55 to \$13.90 in the Eastern Area.

Median hourly earnings increased from 23.8 cents to 50.8 cents in New York and from 13.7 to 42.8 in the Eastern Area.

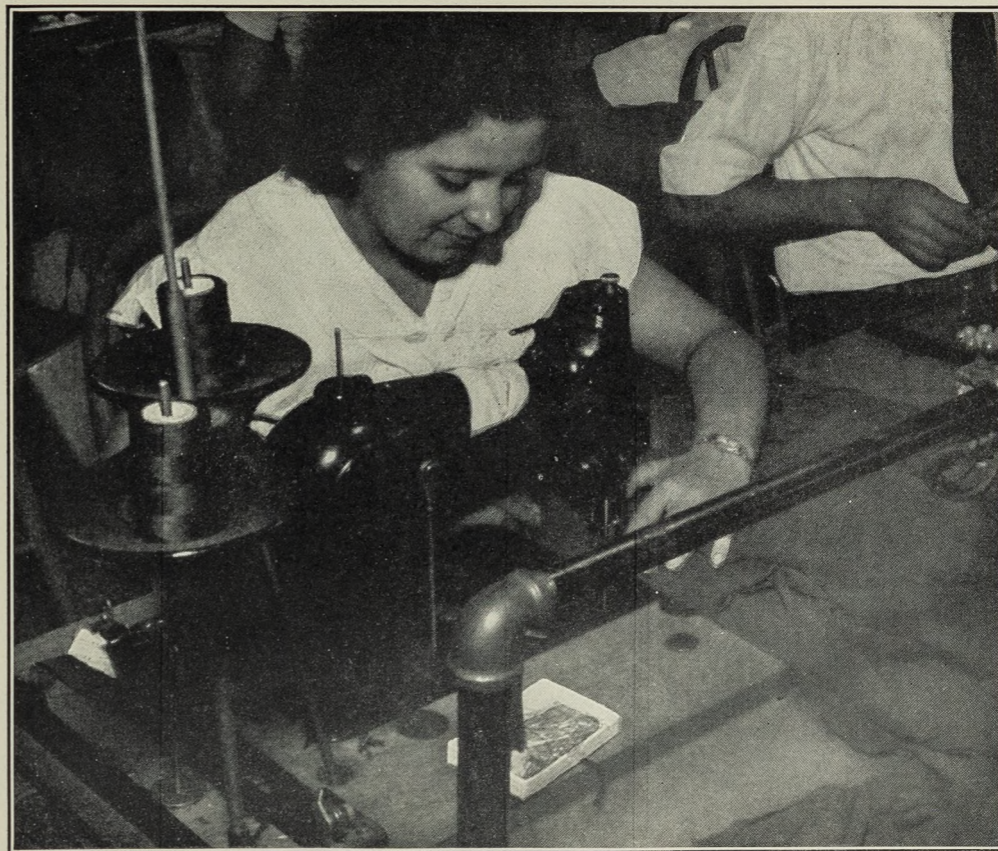
Dresses wholesaling at over \$3.75

Of the six centers reporting, the highest median after the increase in rates was found in New York (\$19.25) and the lowest in Los Angeles (\$14.15).

The Eastern Area, Boston, and Philadelphia showed similar median earnings.

The increase in median weekly earnings after the change was greatest in the Eastern Area and least in New York.

The highest median of hourly earnings after the change was found in New York City, 58 cents an hour. The next highest, 53.8 cents, was in Chicago. The other four centers, Eastern Area, Boston, Philadelphia, and Los Angeles, had similar median hourly earnings with a range of from 44.6 cents to 47.6 cents.



MAKING THE GARMENT.

(Furnished through the courtesy of the Joint Board of the Dressmakers' Union.)



FINISHING THE GARMENT.

(Furnished through the courtesy of the Joint Board of the Dressmakers' Union.)



PRESSING THE GARMENT.

(Furnished through the courtesy of the Joint Board of the Dressmakers' Union.)



EXAMINING THE FINISHED GARMENT.

(Furnished through the courtesy of the Joint Board of the Dressmakers' Union.)

NUMBER OF EMPLOYEES

The dress industry is a large employer of women. In the presentation of facts compiled in the code the text states that in New York City 60 percent and outside of New York City 95 percent of the workers were females. This difference in the proportion of women is much larger than that shown in the Women's Bureau study.

In the 305 factories located in the nine centers from which records were obtained, women formed 80.4 percent of the total number of employees; 84 percent if New York City be excluded. In this city only 67.6 percent of the employees were women.

TABLE 1.—Number of firms and number of employees, by center—after agreement

Center	Firms	Number of employees			Percent women form of total
		Total	Men	Women	
Total.....	305	13, 628	2, 671	10, 957	80. 4
New York City.....	84	3, 042	983	2, 059	67. 7
Eastern Area ¹	86	4, 972	433	4, 539	91. 3
Boston.....	25	694	141	553	79. 7
Philadelphia.....	24	1, 345	463	882	65. 6
Chicago.....	33	1, 322	274	1, 048	79. 3
Cleveland.....	11	372	104	268	72. 0
St. Louis.....	16	710	127	583	82. 1
Los Angeles.....	19	899	131	768	85. 4
St. Paul and Minneapolis.....	7	272	15	257	94. 5

¹ Outside New York City.

Philadelphia had the smallest proportion of women, St. Paul and Minneapolis had the largest, while the greatest difference in proportion among four cities, Boston, Chicago, Los Angeles, and St. Louis, was only six points.

According to the Bureau of Labor Statistics index of employment in the women's clothing industry, the spring is a busier period than the fall. In spite of this fact, in the present study there was a slight increase in employment (4.9 percent) in the fall or winter compared to the spring.

The greatest increase in employment, 13.8 percent, occurred in Cleveland. In two cities, Los Angeles and Chicago, employment decreased, in the latter very slightly, less than 1 percent, but in the former as much as 14.1 percent.

Number of employees

Center	Before agreement	After agreement	Percent increase
Total.....	12, 989	13, 628	4. 9
New York City.....	2, 839	3, 042	7. 2
Eastern Area.....	4, 585	4, 972	8. 4
Boston.....	647	694	7. 3
Philadelphia.....	1, 276	1, 345	5. 4
Chicago.....	1, 330	1, 322	1. 6
Cleveland.....	327	372	13. 8
St. Louis.....	683	710	4. 0
Los Angeles.....	1, 046	899	¹ 14. 1
St. Paul and Minneapolis.....	256	272	6. 3

¹ Decrease.

According to the union agreement and the code a lower minimum wage was established for operators, pressers, and finishers on dresses wholesaling at \$3.75 or less than for those wholesaling at above \$3.75. After the agreement the great majority of workers making the cheaper grade of dresses were found in the area around New York City, and, to a lesser extent, in New York City. Nearly two-thirds of the workers on dresses wholesaling at \$3.75 and less were reported for the Eastern Area (towns near New York City in New Jersey, Connecticut, and New York) and when New York City is added to these, well over four-fifths, 83.1 percent, were in these two centers. In three centers, Los Angeles, Cleveland, and St. Paul and Minneapolis, no records could be obtained from establishments making the lower-priced garments, either because full time had not been worked in the two periods or because payment was not on a piece-work basis.

New York City had the largest proportion of workers, 25.7 percent, making dresses wholesaling for over \$3.75. The number, however, working on these higher-priced garments was less concentrated in New York City and vicinity than was the case with the lower-priced dresses, and Philadelphia, Chicago, and Los Angeles were all centers of considerable importance.

Number of employees, after change, making dresses wholesaling at—

	<i>\$3.75 and less</i>	<i>Over \$3.75</i>
Total.....	4, 989	8, 639
New York City.....	823	2, 219
Eastern Area.....	3, 322	1, 650
Boston.....	119	575
Philadelphia.....	278	1, 067
Chicago.....	240	1, 082
Cleveland.....	372	372
St. Louis.....	207	503
Los Angeles.....	899	899
St. Paul and Minneapolis.....	272	272

HOURS

In a comparison of weekly hours worked before with those worked after the limitation set in the union agreement or in the code,¹ two facts must be remembered, that records were taken from the busiest seasons in both periods and that in the early period, before the limitation of weekly hours, the actual week worked may have been longer in some cases, due to overtime, and in others slightly shorter than was scheduled. It must be remembered that the dress industry is a highly seasonal one and that the numbers employed, the earnings, and the hours worked as shown in this survey are not representative of all seasons of the year. For example, in one city half the shops closed down from 11 to 13 weeks during the year—the smallest number of weeks closed was 7 and the largest 20. It was estimated by those in the industry that the average number of weeks worked in New York City was 32.

There has always been considerable difficulty in obtaining accurate records of hours worked by pieceworkers. In 1913 a study was made by the Bureau of Labor Statistics of the dress and waist industry in New York City. This report states that, "In the case of pieceworkers, there being no regular weekly rates and no record being kept at the factories of the hours they are at work, total earnings during the week, including overtime, had necessarily to be taken."² In the records taken after the change, usually it was possible to obtain the number of hours worked by the pieceworkers, but in the early period before the change comparatively few firms kept such records. In the present study the hours worked by the timeworkers were taken in a few plants where records of actual hours for pieceworkers were not kept, as indicative of the hours of such workers, and in other plants statements of the management had to be the source of information.

In the period before the change scheduled weekly hours in not far from two-fifths (38 percent) of the plants visited were 48 or over. Nearly 6,000 workers, 45 percent of the employees, were working these hours. In one plant a schedule of 64 hours a week was reported and in no shop were weekly hours as short as 35, the standard maximum hours later set by the agreement or the code.

Previous to the change there was considerable variation in the length of the weekly schedule in the different dress centers. Larger proportions of firms in the Eastern Area, Los Angeles, New York City, Philadelphia, and Chicago than in the other centers reported long weekly hours. From 64 percent of those in the Eastern Area to 27 percent of those in Chicago had schedules at least 48 hours in length. The shortest hours were reported in Cleveland and in Boston, the former reporting no establishment with more than 47, and the latter none with more than 45 hours.

¹ Some of the second pay-roll dates are for periods following the union agreement but before the code became effective. Therefore, to avoid the use of "union agreement or the code", hereafter the comparison will be referred to as before and after "the change."

² U. S. Bureau of Labor Statistics. Wages and Regularity of Employment and Standardization of Piece Rates in the Dress and Waist Industry, New York City. Bul. 146, 1914, p. 40.

Center	Number of firms whose hours before the change were—			
	Total	40, less than 44	44, less than 48	48 and over
Total.....	305	42	148	115
New York City.....	84	12	40	32
Eastern Area.....	86	1	30	55
Boston.....	25	17	8	8
Philadelphia.....	24	16	9
Chicago.....	33	2	22	4
Cleveland.....	11	7	4	2
St. Louis.....	16	1	13	8
Los Angeles.....	19	2	9	1
St. Paul and Minneapolis.....	7	6

The gain to the workers in leisure time, and probably in lessened fatigue, by the shorter hours was felt without doubt throughout the entire industry. In the plants included in the present study the approximate shortening of scheduled working time was—

- 5 and less than 9 hours for 10.7 percent of the workers.
- 9 and less than 13 hours for 44.3 percent of the workers.
- 13 hours and over for 45.1 percent of the workers.

For the workers with weekly hours of 48 and over, during the busy season before the change, hours decreased after the change, also a busy time, as much as 13 a week.

These decidedly shorter weekly hours could not fail to affect earnings and production, and when these factors are discussed the change in hours will be considered further.

OPERATORS

The operators, or makers of the dresses, compose much the largest group of workers in the industry. In fact, one-half of all the employees in the plants visited were operators. The workers make the entire garment. It comes to them from the cutter, and they sew the seams, make the sleeves and put them in the dress, finish the neck, and complete the dress except for the final touches added by the finisher.

EARNINGS

For a comparison of their earnings in the various localities and in the two different pay-roll periods, before and after the union agreement or the code enactment, they may be divided into two groups, those employed on dresses whose wholesale price is \$3.75 and under and those whose wholesale price is over \$3.75. The minimum wage set for the cheaper dresses was lower than that for the higher priced in all the centers included in the study, and, although operators on the lower-priced garments might make as much as those on the higher-priced, nevertheless the earnings of the operators as a group were usually greater on dresses wholesaling at over \$3.75.

DRESSES WHOLESALING AT \$3.75 AND LESS

By the union agreement and in the code provisions there were set different minimum wages for various sections of the country, and these differences are to some extent reflected in the earnings reported in the centers included in this study. The minimum wage set for New York City was the highest, that for Boston and Philadelphia next, followed by Chicago and Cleveland, then the Eastern Area, while Los Angeles, St. Louis, and St. Paul and Minneapolis had the lowest of any centers for which records were obtained.

Average weekly earnings.

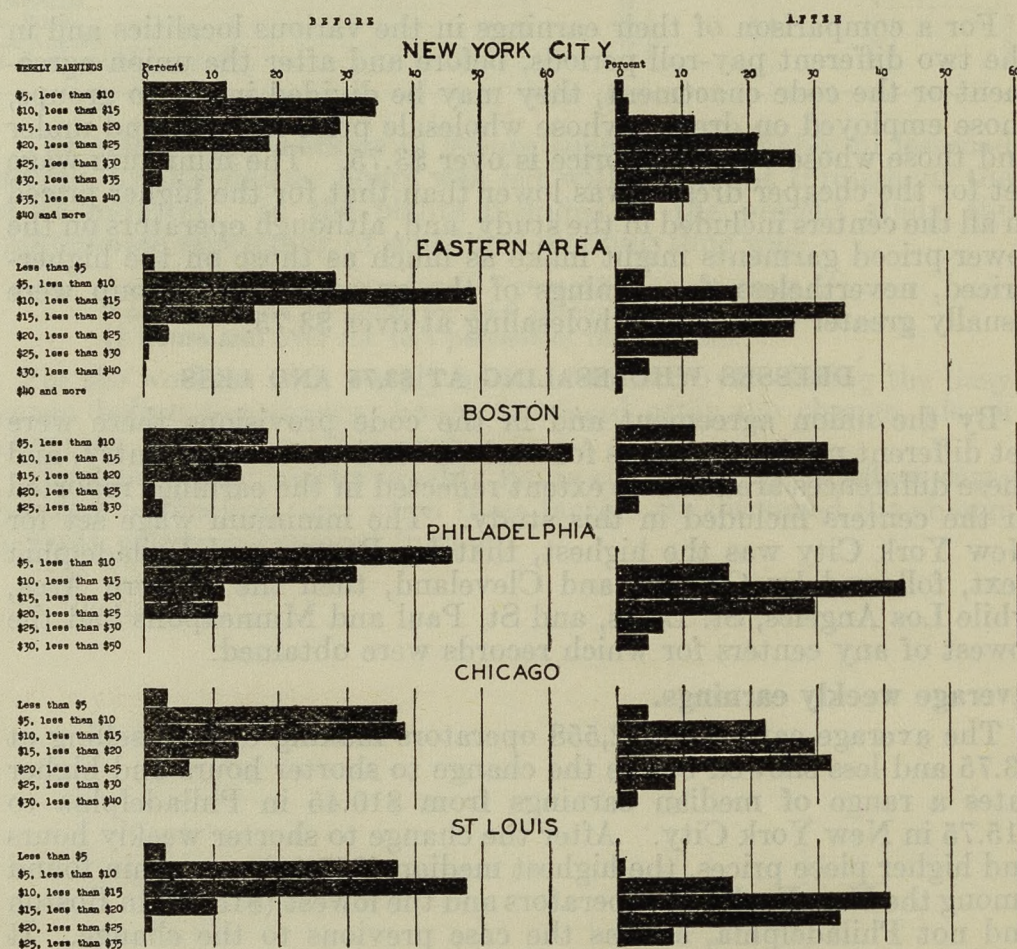
The average earnings of 2,558 operators making dresses selling at \$3.75 and less showed before the change to shorter hours and higher rates a range of median earnings from \$10.45 in Philadelphia to \$15.75 in New York City. After the change to shorter weekly hours and higher piece prices, the highest median (\$27.60) was again found among the New York City operators and the lowest (\$15.50) in Boston and not Philadelphia, as was the case previous to the change. It must be remembered that these increases in actual weekly earnings were accompanied by a decrease in actual hours worked.

Medians of the weekly earnings of operators

Center	Before change		After change	
	Number	Median	Number	Median
New York City.....	400	\$15.75	443	\$27.60
Eastern Area.....	1,686	11.90	1,847	19.10
Boston.....	77	13.05	89	15.50
Philadelphia.....	147	10.45	147	19.15
Chicago.....	152	10.75	165	18.20
St. Louis.....	96	11.00	118	19.15

The earnings of pieceworkers, even with uniform hours of work and piece prices, depend largely on the continuous flow of work, on the number of dresses manufactured from a single model, and on the experience and speed of the operator. Even when the dress sells at the same wholesale price, these factors may cause differences in earnings in the various plants. It was generally conceded that New York shops had an advantage over those in other centers in all these points,

CHART 1.—PERCENT DISTRIBUTION OF AVERAGE WEEKLY EARNINGS OF OPERATORS MAKING DRESSES TO WHOLESALE AT \$3.75 AND LESS BEFORE AND AFTER THE AGREEMENT IN 6 LOCALITIES.



and it was very generally stated by the manufacturers in most of the New York shops that no learners but only skilled operators were hired. Later in this report when the figures on relative production in the different cities are given, the importance of experienced workers and the advantage of greater volume in production are apparent.

After the change in hours and wage rates, workers in all the centers showed marked increases in weekly earnings. In spite of the fact that much shorter hours were worked, median earnings showed an increase. In Philadelphia they increased as much as 83.3 percent while in New York City and in St. Louis they were three-fourths higher after the change. Though Boston showed the lowest percent of increase, only 18.8 percent, it should also be noted that, with the

exception of New York, this city showed the highest median earnings previous to the change.

Percent increase in median of the weekly earnings after the change

	Percent
New York City.....	75.2
Eastern Area.....	60.5
Boston.....	18.8
Philadelphia.....	83.3
Chicago.....	69.3
St. Louis.....	74.1

Manufacturers in Boston contract shops complained of the cutting of prices by jobbers, of the small number of garments ordered on a single model, and of the impossibility of getting enough experienced operators. All these conditions may have affected earnings, as the figures show that of 89 operators reporting earnings after the change in hours and wage rates, only 39 had been in the employ of their present firms in the early pay period. There is, however, no record to show how many of the new names on the pay roll were of experienced workers and how many of learners.

Although median earnings or averages give a useful figure for comparative purposes, an even better picture can be shown by the distribution of weekly earnings for large groups of operators before and after the change. In New York somewhat over three-fifths of the operators making dresses that wholesaled at \$3.75 and under averaged \$10 and less than \$20 a week before the new scale became effective, while afterward an even larger proportion earned \$20 and less than \$35 a week. All the centers showed increases, with practically three-fifths or more of the operators after the change having weekly earnings that began at the amount where previous to the agreement or code three-fifths or more had left off.

Range of average weekly earnings before and after the change for a majority of the operators

New York City:	
Before change.....	62.8 percent earned \$10 and less than \$20 a week.
After change.....	69.5 percent earned \$20 and less than \$35 a week.
Eastern Area:	
Before change.....	78.4 percent earned \$5 and less than \$15 a week.
After change.....	72.6 percent earned \$15 and less than \$30 a week.
Boston:	
Before change.....	63.6 percent earned \$10 and less than \$15 a week.
After change.....	57.3 percent earned \$15 and less than \$30 a week.
Philadelphia:	
Before change.....	76.9 percent earned \$5 and less than \$15 a week.
After change.....	72.1 percent earned \$15 and less than \$25 a week.
Chicago:	
Before change.....	76.3 percent earned \$5 and less than \$15 a week.
After change.....	61.8 percent earned \$15 and less than \$25 a week.
St. Louis:	
Before change.....	85.4 percent earned \$5 and less than \$15 a week.
After change.....	73.7 percent earned \$15 and less than \$25 a week.

According to the preceding summary the earnings of these large groups of New York operators reached higher levels than any other center both previous to and after the union agreement, while in the other centers the ranges of earnings were similar both in the early and late periods.

With the introduction of a minimum wage the effect on the low earnings group is most marked. In three of the six centers manufacturing the less expensive dresses, earnings of less than \$10 a week were reported before the change for over 40 percent of the operators. After the change the percent of operators earning less than \$10 ranged from only 11.2 percent of those in Boston to less than 1 percent in New York City and St. Louis. No operator was reported receiving such low earnings in Philadelphia.

Percent of operators averaging less than \$10 a week

	<i>Before change</i>	<i>After change</i>
New York City.....	12.0	0.5
Eastern Area.....	29.8	4.1
Boston.....	18.2	11.2
Philadelphia.....	45.6	---
Chicago.....	40.8	4.8
St. Louis.....	40.6	.8

After the introduction of the 35-hour week and the establishment of a minimum wage, the proportion of operators with low earnings not only decreased but there was an equally sharp increase in the higher earnings group of \$20 and over. Before the change less than 7 percent of the operators reported such earnings in four of the centers. In Philadelphia slightly over 11 percent and in New York about 25 percent earned as much as \$20. With the exception of New York, comparatively few operators on low-priced dresses earned as much as \$25 previous to the change.

After the change two-fifths of all the operators in each of four centers and about seven-eighths of those in New York City earned \$20 and over.

Percent of operators averaging \$20 and over a week

	<i>Before change</i>	<i>After change</i>
New York City.....	25.3	86.5
Eastern Area.....	4.1	44.3
Boston.....	3.9	21.3
Philadelphia.....	11.6	40.8
Chicago.....	6.6	43.6
St. Louis.....	1.0	41.5

Average hourly earnings.

The foregoing discussion of weekly earnings, although showing the actual amount in the pay envelope, does not take into consideration the number of hours worked to procure the amount received. In the period previous to the change, weekly hours were considerably longer than in the period after the change. When earnings of operators are reduced to an hourly average for the two periods, the number of hours worked in each is considered, and a comparison of earnings for the two periods is on a more equal footing.

Weekly hours were shortened by from 5 to 29 between the first and second periods for which records were obtained in this study. At the same time rates of pay were much increased, so that for both the cheaper and more expensive dresses hourly earnings show a very decided increase.

Previous to the change the average hourly earnings of operators working on the cheaper dresses varied from a low median of 21.4 cents an hour in Philadelphia to a high of 32.7 cents in New York. After the change was effected, the highest hourly average was again found in New York, 81.4 cents an hour, and the lowest in Boston, 49.3 cents an hour.

Median of the hourly earnings of operators

	<i>Before change (cents)</i>	<i>After change (cents)</i>
New York City.....	32.7	81.4
Eastern Area.....	24.0	61.4
Boston.....	31.2	49.3
Philadelphia.....	21.4	53.7
Chicago.....	22.8	57.3
St. Louis.....	24.9	57.5

The same center, New York, reported the highest average hourly earnings and the highest average weekly earnings both before and after the change. Average hourly earnings were lowest before the change in Philadelphia, but after the change Boston reported the lowest earnings. The proportionate difference, however, between the highest and lowest median of the hourly earnings was greater than that between the highest and lowest weekly earnings.

The percent of change in a given city is perhaps the best indication of the change in earnings between two periods. Where earnings, as in New York, were high before the change, the percent of increase is smaller than in several other cities where earnings before the change were low.

In five of the six cities average hourly earnings showed an increase (after the change) of from 130.9 to 155.8 percent; Boston was the only city where the increase was below 100 percent, namely, 58 percent. In all centers the increase in average hourly earnings was high compared to the increase in average weekly earnings.

Percent of increase after change in—

	<i>Median of the hourly earnings</i>	<i>Median of the weekly earnings</i>
New York City.....	148.9	75.2
Eastern Area.....	155.8	60.5
Boston.....	58.0	18.8
Philadelphia.....	150.9	83.3
Chicago.....	151.3	69.3
St. Louis.....	130.9	74.1

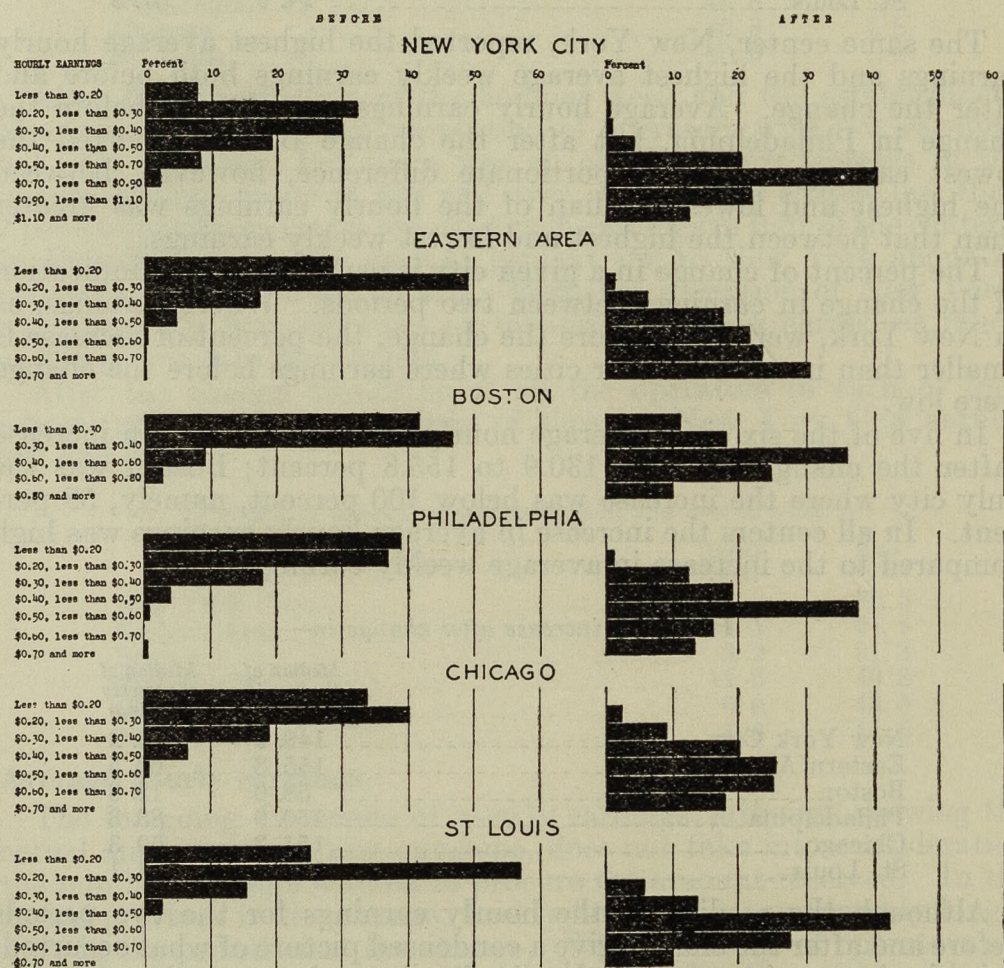
Although the median of the hourly earnings for the two periods before and after the change give a condensed picture of what occurred, it is also interesting to note the distributions of average hourly earnings in the two periods. In the early period hourly earnings for from 69.1 to 72.6 percent of the operators were below 28 cents in Chicago, the Eastern Area, Philadelphia, and St. Louis. After the change no operator in St. Louis or Philadelphia, and less than 1 percent in New York and the Eastern Area, reported earnings below 28 cents an hour.

Percent of operators averaging less than 28 cents an hour

	Before change	After change
New York City.....	34.8	0.2
Eastern Area.....	70.1	.8
Boston.....	32.5	10.1
Philadelphia.....	71.4	---
Chicago.....	69.1	2.5
St. Louis.....	72.6	---

Previous to the change comparatively few operators in the various centers—none in St. Louis—had average hourly earnings of 50 cents or over. After the change from 48.3 percent to 94.8 percent showed

CHART 2.—PERCENT DISTRIBUTION OF AVERAGE HOURLY EARNINGS OF OPERATORS MAKING DRESSES TO WHOLESALE AT \$3.75 AND LESS BEFORE AND AFTER THE AGREEMENT IN 6 LOCALITIES.



these earnings, and in St. Louis, where no operators earned these amounts before the change, four-fifths after the change earned 50 cents and over.

Percent of operators averaging 50 cents an hour and over

	Before change	After change
New York City.....	13.1	94.8
Eastern Area.....	.5	75.1
Boston.....	3.9	48.3
Philadelphia.....	1.4	67.1
Chicago.....	.7	68.1
St. Louis.....	---	80.5

DRESSES WHOLESALING AT OVER \$3.75

The higher-priced dresses wholesaling at over \$3.75 were manufactured in all the nine centers in which records were taken.

Average weekly earnings.

New York City had the highest median earnings both before and after the change. Philadelphia had the next highest, but about a fifth below those for New York before and about a sixth after the change. The lowest median earnings before the change were \$10.65 in St. Louis and after the change \$17.85 in Los Angeles.

Median of the weekly earnings of operators

	Before change		After change	
	Number	Median	Number	Median
New York City.....	928	\$23.15	955	\$34.75
Eastern Area.....	783	13.35	856	22.25
Boston.....	268	15.00	294	19.70
Philadelphia.....	430	18.50	513	28.65
Chicago.....	538	14.50	499	21.75
Cleveland.....	152	12.80	182	27.35
St. Louis.....	257	10.65	236	18.50
Los Angeles.....	480	11.85	396	17.85
St. Paul and Minneapolis.....	115	11.50	106	18.20

The median of the earnings for the higher-priced garments was greater than for the lower-priced both previous to and after the change in all centers excepting St. Louis, where the medians for the cheaper dresses were higher both before and after the change.¹ The higher earnings found in the manufacture of the more expensive dresses after the change would be expected as a higher minimum wage was set for dresses wholesaling above \$3.75, but the figures show that even before the change earnings were higher in the shops manufacturing the more expensive dresses.

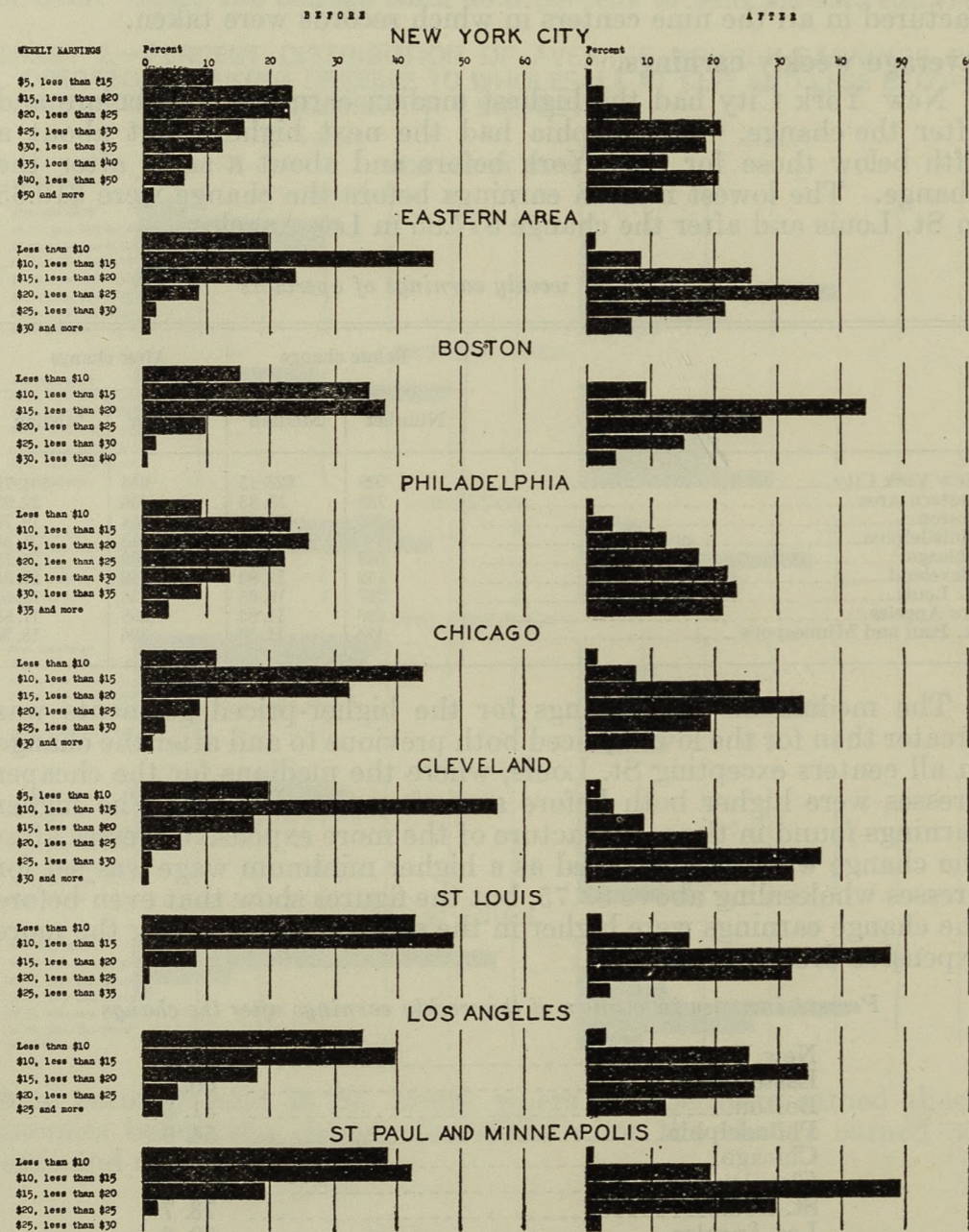
Percent increase in median of the weekly earnings after the change

New York City.....	50.1
Eastern Area.....	66.7
Boston.....	31.3
Philadelphia.....	54.9
Chicago.....	50.0
Cleveland.....	113.7
St. Louis.....	73.7
Los Angeles.....	50.6
St. Paul and Minneapolis.....	58.3

¹ It must be remembered that the cities of Cleveland, Los Angeles, and St. Paul and Minneapolis are not included in the lower-priced dress centers.

In every center except Boston there was an increase in the median weekly earnings after the change of at least 50 percent. The greatest increase was found in Cleveland, where earnings more than doubled, while Boston showed the least increase (31.3 percent). This considerably lower increase in the earnings of the Boston operators making the higher-priced garments was found also among those working on the lower-priced garments in that city where the increase in earnings was only 18.8 percent.

CHART 3.—PERCENT DISTRIBUTION OF AVERAGE WEEKLY EARNINGS OF OPERATORS MAKING DRESSES TO WHOLESALE AT OVER \$3.75 BEFORE AND AFTER THE AGREEMENT IN 9 LOCALITIES.



Before the change, in three of the nine centers earnings of a great majority of the operators were \$5 and less than \$20 a week, in three other centers \$5 and less than \$15, in one, \$10 and less than \$25, in

another, \$10 and less than \$20, and in the ninth, New York, \$15 and less than \$35. After the change, earnings for a large majority of the operators were \$15 and less than \$30 a week in the Eastern Area, Boston, and Chicago, \$20 and less than \$35 and \$15 and less than \$25 in two centers each, \$10 and less than \$25 in one and \$25 and less than \$50 in another center, the last range being for New York City.

Range of average weekly earnings before and after the change for a majority of the operators

New York City:	
Before change	73.8 percent earned \$15 and less than \$35.
After change	77.3 percent earned \$25 and less than \$50.
Eastern Area:	
Before change	87.1 percent earned \$5 and less than \$20.
After change	83.3 percent earned \$15 and less than \$30.
Boston:	
Before change	87.3 percent earned \$5 and less than \$20.
After change	86.4 percent earned \$15 and less than \$30.
Philadelphia:	
Before change	70.7 percent earned \$10 and less than \$25.
After change	62.8 percent earned \$20 and less than \$35.
Chicago:	
Before change	76.2 percent earned \$10 and less than \$20.
After change	80.0 percent earned \$15 and less than \$30.
Cleveland:	
Before change	75.0 percent earned \$5 and less than \$15.
After change	78.0 percent earned \$20 and less than \$35.
St. Louis:	
Before change	87.5 percent earned \$5 and less than \$15.
After change	78.8 percent earned \$15 and less than \$25.
Los Angeles:	
Before change	90.0 percent earned \$5 and less than \$20.
After change	85.1 percent earned \$10 and less than \$25.
St. Paul and Minneapolis:	
Before change	78.3 percent earned \$5 and less than \$15.
After change	78.3 percent earned \$15 and less than \$25.

The effect of the change on earnings at each end of the scale can be illustrated by showing the percent of operators whose earnings in each period were under \$15 and \$25 and over.

With the exception of New York and Philadelphia, the various centers reported from 50 to 91 percent of their operators earning less than \$15 a week previous to the change. After the change, 27.8 percent were found with such earnings in Los Angeles and less than 10 percent in each of the 6 other centers earned less than \$15.

Percent of operators averaging less than \$15 a week

	After change	Before change
New York City	10.8	0.3
Eastern Area	65.0	9.5
Boston	50.0	9.2
Philadelphia	31.9	4.5
Chicago	55.2	9.8
Cleveland	75.0	6.0
St. Louis	91.1	17.8
Los Angeles	73.8	27.8
St. Paul and Minneapolis	80.0	19.8

Previous to the change, earnings of \$25 or over were rarely found in any centers except New York and Philadelphia. In fact, in St. Louis and in St. Paul and Minneapolis no earnings as high as these

were reported and in the other five centers only from 2 to 3.9 percent of the operators earned as much as \$25. After the change, all centers, even St. Louis and St. Paul and Minneapolis, although the proportion was small, reported earnings of \$25 and over. In New York nearly 9 of every 10 operators earned \$25 or more and in Philadelphia and in Cleveland about two-thirds reported these earnings.

Percent of operators averaging \$25 and over a week

	<i>Before change</i>	<i>After change</i>
New York City.....	43.5	89.0
Eastern Area.....	2.9	28.6
Boston.....	2.6	20.1
Philadelphia.....	20.5	65.7
Chicago.....	3.9	29.7
Cleveland.....	2.0	66.5
St. Louis.....	—	3.4
Los Angeles.....	3.3	12.1
St. Paul and Minneapolis.....	—	1.9

Among the various factors that frequently affect earnings are, as already has been mentioned, the flow of work, organization of the shop, and the number of garments made from a single model. Whether these conditions or any others are more favorable in a large than in a small shop has often been discussed. If the relative earnings of the operators in the different size establishments are examined, there would appear to be no connection between the size of the shop and earnings. For example, in New York City after the change the highest median earnings for operators on dresses wholesaling at \$3.75 and under were found in the shops employing 50 and less than 100 persons, but in the Eastern Area the highest earnings were in the small shops with less than 25 employees, followed very closely, however, by those employing 150 to 200 persons. In Philadelphia, Chicago, and St. Paul and Minneapolis the workers in the shops with few employees had the highest earnings, while in Los Angeles those working in shops employing from 50 to 100 persons had the highest earnings. In establishments where higher-priced garments were made there was the same lack of uniformity. Shops with less than 25 employees reported the highest earnings in three centers and those with 50 to 100 employees in one center, but in three of the six centers the best earnings were in factories employing from 25 to 50 operators and in only one center were the highest earnings found in plants employing as many as 100 employees.

Average hourly earnings.

It has already been mentioned that, according to the union agreement and the code, the minimum hourly rate for workers on dresses wholesaling at over \$3.75 was higher than that for operators on dresses wholesaling at \$3.75 and less. It is natural, therefore, to find that after the change median hourly earnings were higher for the more expensive garments than for the low-priced in all the centers but one, St. Louis. In that city average hourly earnings were slightly higher for the cheaper garments both before and after the change. This condition of higher earnings in the plants making cheaper dresses was unusual and was found in no other center.

The two extremes of average hourly earnings previous to the change were found in New York City and St. Louis, the former with the

highest median of 49.8 cents and the latter with the lowest of 23.5 cents. Between these two extremes there was considerable variation, although in six of the seven areas average hourly earnings were from 31.1 to 39.4 cents.

Median of the hourly earnings of operators

	<i>Before change (cents)</i>	<i>After change (cents)</i>
New York City.....	49.8	101.9
Eastern Area.....	27.8	69.8
Boston.....	37.0	60.8
Philadelphia.....	39.4	82.4
Chicago.....	31.8	68.2
Cleveland.....	31.1	80.0
St. Louis.....	23.5	55.1
Los Angeles.....	34.3	64.6
St. Paul and Minneapolis.....	33.8	57.5

The percent by which hourly earnings increased between the early and the late period was more than 100 in six of the nine centers, and in Cleveland and the Eastern Area it was over 150 percent. Both before and after the change the highest and lowest earnings were found in the same cities—New York and St. Louis, respectively—but in the other centers there was less similarity of earnings in the late than in the early period. In St. Louis, with the lowest hourly earnings before the change, the percent of increase after the change was not as high as in either Cleveland or the Eastern Area, but it did rank third in the proportion of increase in the different centers. In comparing St. Louis with the other centers it must be remembered that the minimum wage set by the code was lower for St. Louis than for any other center included in this survey, except Los Angeles and St. Paul and Minneapolis.

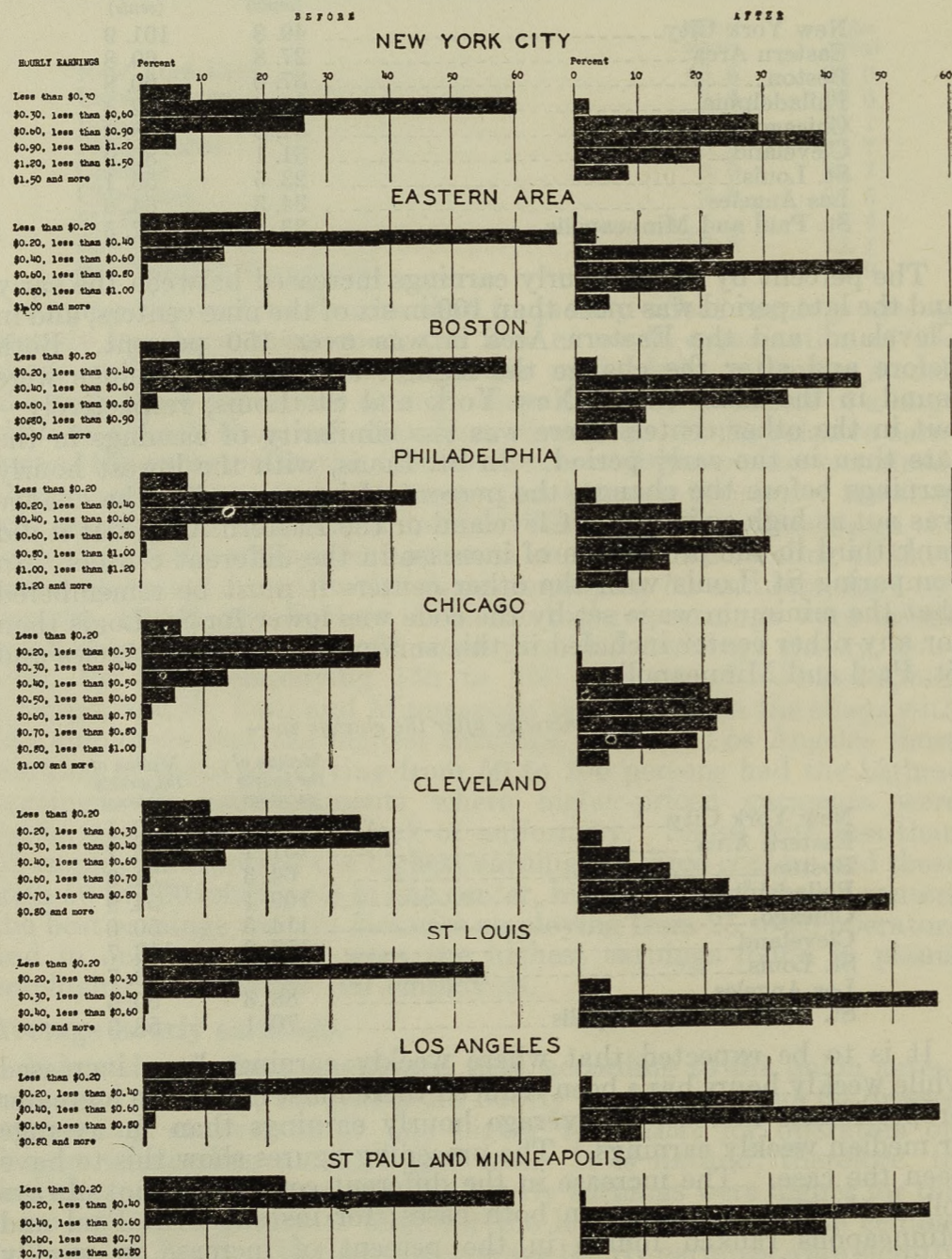
Percent of increase after the change in—

	<i>Median of the hourly earnings</i>	<i>Median of the weekly earnings</i>
New York City.....	104.8	50.1
Eastern Area.....	151.1	66.7
Boston.....	64.3	31.3
Philadelphia.....	109.1	54.9
Chicago.....	114.5	50.0
Cleveland.....	157.2	113.7
St. Louis.....	134.5	73.7
Los Angeles.....	88.3	50.6
St. Paul and Minneapolis.....	70.1	58.3

It is to be expected that where weekly earnings have increased while weekly hours have been reduced there must have been a greater proportionate increase in average hourly earnings than in average or median weekly earnings. The preceding figures show this to have been the case. The increase in the different centers did not always follow the same sequence in both cases; for instance, St. Paul and Minneapolis ranked fourth in the percent of increase in weekly median earnings but eighth in hourly earnings. Chicago ranked eighth in its percent increase in weekly earnings and only fourth in increase in its hourly earnings. On the other hand, Cleveland had the highest percent of increase for both hourly and weekly earnings and Boston had the lowest, while Philadelphia ranked fifth in each case. In other words, in centers where long hours were worked in

the period before the change, hourly earnings increased more sharply than did weekly earnings and, vice versa, when hours worked before the code were short the increase corresponds more nearly with that of weekly earnings.

CHART 4.—PERCENT DISTRIBUTION OF AVERAGE HOURLY EARNINGS OF OPERATORS MAKING DRESSES TO WHOLESALE AT OVER \$3.75 BEFORE AND AFTER THE AGREEMENT IN 9 LOCALITIES.



Before the minimum wage set by the union agreement and the code, earnings had sunk to very low levels. Operators whose earnings averaged less than 20 cents an hour were found in all the centers, and the proportion with these earnings in St. Louis was almost 30 percent of all the operators. Before the change, earnings of less than 40 cents an hour were earned by the majority of operators in all the

centers—in most cases the vast majority—except New York City. Previous to the change in hours and rates, five of the nine centers reported over four-fifths of the operators with these low earnings. After the change, although a few in each center still earned below 40 cents an hour, they constituted but a very small percent of the total number of operators, less than 4 percent in all centers except St. Louis. In that city, where before the change 99.1 percent of the operators had earned less than 40 cents, after the change only 5.2 percent reported such earnings.

Percent of operators averaging less than 40 cents an hour

	Before change	After change
New York City	27.0	0.1
Eastern Area	85.7	3.5
Boston	64.6	3.4
Philadelphia	51.2	3.1
Chicago	78.5	.6
Cleveland	84.6	3.8
St. Louis	99.1	5.2
Los Angeles	80.3	1.8
St. Paul and Minneapolis	81.7	.9

New York was the only city with a considerable proportion (31.9 percent) of its operators earning as much as 60 cents before the change. The next largest proportion (8.1 percent) was in Philadelphia, while less than 3 percent received such earnings in each of the other centers. In St. Louis and St. Paul and Minneapolis no operator achieved these high earnings. However, in the later period, 60 cents and over was the prevailing hourly wage in all the centers but two—St. Louis with 37.1 percent and St. Paul and Minneapolis with 43 percent of its operators with such wages. In New York City the proportion was as high as 97.6 percent.

Percent averaging 60 cents and over an hour

	Before change	After change
New York City	31.9	97.6
Eastern Area	1.2	71.5
Boston	2.6	51.4
Philadelphia	8.1	80.1
Chicago	2.3	70.5
Cleveland	2.0	87.9
St. Louis	—	37.1
Los Angeles	2.3	67.5
St. Paul and Minneapolis	—	43.4

NEW YORK CITY

In New York City, the center of the dress industry, shops were found in every wholesale-price group. In the present study no plants were included where the major product in a shop wholesaled for more than \$12.75, but within the range of garments from \$3.75 and less to \$12.75 enough factories were taken in New York City to make comparisons possible between different wholesale-price groups. In other centers there were not enough factories nor employees to make these subdivisions feasible.

In comparing earnings of operators on different price dresses before the union agreement the lowest median earnings were found, as might be expected, for the group on dresses wholesaling at \$3.75 and less

but the highest median earnings were not for workers on the most expensive group of dresses but for those on dresses wholesaling at \$6.75 and \$7.75.

Median of the weekly earnings

	<i>Before change</i>	<i>After change</i>
\$3.75 and less.....	\$15.75	\$27.60
\$4.75 and \$5.75.....	22.90	35.20
\$6.75 and \$7.75.....	24.40	35.20
\$8.75.....	22.25	34.65
\$10.75 to \$12.75.....	23.05	34.00

After the change the highest earnings were in the two groups \$4.75 and \$5.75 and \$6.75 and \$7.75 but the lowest earnings were still in the group of lowest-priced dresses of \$3.75 and less. It is not surprising to find the lowest earnings in this low-priced group both previous to and after the change.

After the change to a 35-hour week and the establishment of a minimum wage, earnings showed an increase in all the groups, but the greatest proportionate rise took place in the shops making the cheapest dresses. The smallest increase took place in the earnings of the group making dresses wholesaling at \$6.75 and \$7.75, where earnings were the highest both before and after the change.

Percent increase in median weekly earnings after change

\$3.75 and less.....	75.2
\$4.75 and \$5.75.....	53.7
\$6.75 and \$7.75.....	44.3
\$8.75.....	55.7
\$10.75 to \$12.75.....	47.5

WEEKLY PRODUCTION OF OPERATORS

No two people, in all probability, work exactly alike, and in no two shops is the work exactly the same in set-up, supervision, equipment, or product. Nevertheless, if the number of operators and the number of establishments are sufficiently large, the average production of the group may be representative. It has been very generally conceded that production per operator varies in different shops and in different sections of the country, due to equipment and method of work, to volume on a single style, to efficiency, and, possibly, to differences in skill between groups of workers. There is also a question as to the effect on the rate of production of a shortening of hours, but in this study no attempt has been made to determine this relationship.

PRODUCTION OF OPERATORS ON DRESSES WHOLESALING AT \$3.75 AND LESS

In the following discussion of the production records three important angles of the differences in weekly production of operators are considered: First, the differences in various cities making the same price garment and working under the same weekly schedule of 35 hours after the agreement; second, the differences between early and late periods, the latter after scheduled weekly hours had been shortened by from 5 to 29 hours; and third, the differences between operators who worked in the same establishment in both periods and those who were employed in only one.

Comparative production after the change, by locality.

Average production in the late period, when the 35-hour week prevailed in every locality, was highest in New York City, with the Eastern Area next in rank, and Boston and Chicago tied for third place. Fewer operators had a high production of 80 or more dresses in St. Louis and Philadelphia than in any other center, but these two cities had a large majority of their workers in the middle production group of 40 and less than 80 dresses a week.

Center	Average weekly output per operator	Percent of operators making—		
		Less than 40 dresses	40, less than 80 dresses	80 dresses and more
<i>After agreement</i>				
New York City.....	68	5.2	63.1	31.7
Eastern Area.....	61	17.4	62.8	19.8
Boston.....	57	15.9	72.7	11.4
Philadelphia.....	52	15.4	80.5	4.1
Chicago.....	57	26.6	53.2	20.2
St. Louis.....	49	24.8	74.3	.9

Production before and after the change.

If the variation in production before and after the change is examined for the operators in firms with production records for both periods, decidedly less variation is found between the early and late period in every area but Chicago.² The astonishing thing, however, is not that there was a reduction in the weekly rate of production in all cities, but, with such a general reduction of hours, that there was not more of a reduction than was the case. There was a great deal more shifting from the highest into the average group than from the average into the lowest group. This would indicate that the shortening of the work time was compensated to a great extent by improvements in management, or in method, size of orders, and possibly increased speed in operation.

The most significant change in production occurred in the Eastern Area, where hours had been longest. The rather drastic reduction in hours in this area may account for the much smaller proportion of operators making as many as 80 dresses. That there was not a corresponding shifting in this area into the group making less than 40 dresses may be due to the fact that almost 70 percent of the operators had been employed in the early period and were used to the shop and the work.

The figures on page 30 give the production in the six cities before and after the change. The proportions differ from those previously shown for New York City, the Eastern Area, and Philadelphia, as some firms in these localities had production records for the late period only, for which reason their records are excluded from the present comparison of figures in firms with production records for both periods.

It might appear from the following figures that the change in production was more pronounced in Boston than in the Eastern Area, but as there were only about one-tenth as many observations in the former, the change, though significant, is not relatively so important as that in the Eastern Area. Moreover, the explanation for the change in Boston cannot be found primarily in a great reduction in hours, as the average schedule before the change was quite low, only

² The records for operators who worked both periods show less variation in the later period.

about 42 hours. It may be partly explained, however, by statements made by some of the Boston employers, who said that the volume of work on a single model was in most cases low. This would of course affect production.

Center	Number of operators	Percent of operators making—		
		Less than 40 dresses	40, less than 80 dresses	80 dresses and more
New York City:				
Before change	205	2.4	48.3	49.3
After change	214	6.5	65.4	28.0
Eastern Area:				
Before change	769	12.2	43.2	44.6
After change	837	19.2	63.2	17.6
Boston:				
Before change	65	3.1	50.8	46.2
After change	88	15.9	72.7	11.4
Philadelphia:				
Before change	49	6.1	75.6	18.4
After change	60	10.0	85.0	5.0
Chicago:				
Before change	105	2.9	58.1	39.0
After change	124	26.6	53.2	20.2
St. Louis:				
Before change	62	14.5	69.4	16.1
After change	113	24.8	74.3	9

Because of the small number of women engaged in making these inexpensive dresses in Philadelphia, the change can be considered significant only as it follows the general trend.

Comparative production of operators employed in the same firm in both periods and of all other operators.

Emphasis has been laid on the importance of experience to earning power and production when the pay is based on the number of pieces produced. It is important, therefore, to consider the production of a group of operators who worked in the same shop in both periods. Though other workers may have been equally experienced, it may safely be assumed that operators who held their positions through the period of change, or who were rehired by the same firm after the higher standards were adopted, were among the best to be had.

Philadelphia had the largest proportion, 74.8 percent, and St. Louis the smallest, only 40.7 percent, of operators who worked for the same firms in both periods. The low proportion in St. Louis is interesting in the light of the very low average production in that city. On the other hand, the high proportion of operators with continued records of service in Philadelphia was not reflected in the average production, which was not much higher than that for operators in St. Louis.

The comparative production of the two groups of operators, those who worked both periods in the same plant and those who worked in only one period, shows a general tendency for better production in the group working in both periods. There are too few records in the cities scheduled to make the findings significant except in two areas—the Eastern Area, where only 1 in 8 of the 700 operators employed in both compared with 1 in 4 of the 300 operators employed at the latter date only, produced less than 40 dresses, and New York City, where the proportions in the respective groups producing less than 40 dresses were quite similar and both less than 7 percent. This is as would be expected since the skill of the labor supply in this city is generally acknowledged so that new workers are also experienced. It is interesting to note, however, that more than one-

third (36.6 percent) of the operators employed in both periods, as compared to more than one-fifth (22.6 percent) of those not so employed, produced 80 dresses and more. The comparative figures for production of operators known to have been employed by the same firm in both periods and for all operators employed in only the latter period is shown below.

Center	Number of operators	Percent of operators making—		
		Less than 40 dresses	40, less than 80 dresses	80 dresses and more
New York City:				
Operators employed in both periods	175	4.6	58.9	36.6
Operators not employed in both periods	93	6.5	71.0	22.6
Eastern Area:				
Operators employed in both periods	723	13.0	65.0	22.0
Operators not employed in both periods	318	27.4	57.9	14.8
Boston:				
Operators employed in both periods	145	8.9	73.3	17.8
Operators not employed in both periods	143	23.3	72.1	4.7
Philadelphia:				
Operators employed in both periods	92	17.4	79.3	3.3
Operators not employed in both periods	131	9.7	83.9	6.5
Chicago:				
Operators employed in both periods	76	19.7	61.8	18.4
Operators not employed in both periods	148	37.5	39.6	22.9
St. Louis:				
Operators employed in both periods	146	19.6	78.3	2.2
Operators not employed in both periods	67	28.4	71.6	-----

¹ Note that percents are shown here for less than 50 cases.

PRODUCTION OF OPERATORS MAKING DRESSES WHOLESALING AT OVER \$3.75

The rate of production on dresses whose wholesale price was over \$3.75 was lower than on the less expensive grades. Naturally the more expensive dresses require more work and greater skill. Further, the volume on one model probably is less. It may be partly due to these facts that much more variation in production was found between different centers in this group than on the cheaper garments. Another reason for a great deal of variation even within the same city may be illustrated by the differences found in production between two subdivisions of the higher-priced group. In fact, the average production figures show in some localities almost as much difference between the rate of production on the \$4.75 to \$8.75 dresses and that on the \$10.75 to \$12.75 dresses, as between the rate on the \$4.75 to \$8.75 dresses and on those for \$3.75 and less. The detailed figures follow:

Center	Average weekly output per operator on dresses wholesaling at—		
	\$3.75 and less	\$4.75 to \$8.75	\$10.75 to \$12.75
New York City	68	50	35
Eastern Area	61	44	31
Boston	57	28	19
Philadelphia	52	40	22
Chicago	57	29	19
Cleveland	-----	¹ 26	20
St. Louis	49	27	19
Los Angeles	¹ 30	21	19
St. Paul and Minneapolis	-----	28	¹ 18

¹ In less than 3 establishments.

Naturally, any comparison of production between cities should take into account these differences, even though the agreement and code did not recognize the need for establishing earnings minima beyond the two major divisions.

From these figures it is clear that with the one exception of the Eastern Area, with only a comparatively slight difference, the *production* in other dress centers shows far greater differences than do the *rates* allowed for under the code minima.

It is impossible to determine to what extent the lower output per operator in the various cities is caused by smaller volume on a single style, by older machines, by less efficient management, by a greater proportion of inexperienced workers, or by a slower tempo on the part of the operators. Probably all these factors influence the result.

Comparative production after the change, by locality.

The average production of dresses wholesaling at over \$3.75 after the change is shown below for the nine areas visited.

Center	Percent of operators making—		
	Less than 20 dresses	20, less than 40 dresses	40 dresses and more
	After agreement		
New York City.....	2.0	41.7	56.3
Eastern Area.....	2.4	47.0	50.6
Boston.....	29.6	64.5	5.9
Philadelphia.....	15.5	54.1	30.3
Chicago.....	49.6	45.7	4.7
Cleveland.....	40.7	59.3	-----
St. Louis.....	45.5	47.0	7.4
Los Angeles.....	57.3	41.4	1.3
St. Paul and Minneapolis.....	17.1	81.9	1.0

The high average production in New York and the Eastern Area is further substantiated by the very small proportion of operators making less than 20 dresses and the very high proportion making as many as 40 dresses. In these two groups the majority are working on dresses wholesaling at \$4.75 to \$8.75. In Chicago, where production is quite low, the large majority of workers are employed in making \$10.75 to \$12.75 dresses. Production figures are also quite low in Los Angeles, where less than one-half of the workers are employed on the most expensive dresses. However, maximum piece prices in Los Angeles and Chicago are quite similar, only one firm in each city paying less than \$1 as a maximum.

Production before and after the change.

The agreement and code called for a 35-hour week, which necessitated reductions in hours for workers on the higher-priced dresses similar to those on the lower-priced. Production records for the periods before and after the change would be expected to reflect these reductions in hours. In the following comparison production is shown only for those firms with records for both periods.

In New York City and the Eastern Area the shifting had been principally from the group making more than 40 dresses to the average group making 20 and less than 40. In Boston, Chicago, and Los Angeles, however, the proportion making less than 20 dresses was greatly augmented after the reduction in hours. In Boston the proportion in the average group was practically the same at both periods. As a whole, the distributions in Boston, Los Angeles, New York, and the Eastern Area³ were more markedly affected than those

³ Significant differences in the Eastern Area were found when the middle group was chosen as 30 to 50 dresses.

in the other areas. The most unexpected change occurred in Philadelphia, where a decidedly smaller proportion of operators was found making less than 20 dresses after the reduction in hours.

Center	Number of operators	Percent of operators making—		
		Less than 20 dresses	20, less than 40 dresses	40 dresses or more
New York City:				
Before change.....	632	2.5	26.7	70.7
After change.....	630	1.9	41.9	56.2
Eastern Area:				
Before change.....	204	3.4	33.8	62.7
After change.....	270	2.2	41.9	55.9
Boston:				
Before change.....	180	13.9	62.2	23.9
After change.....	203	29.6	64.5	5.9
Philadelphia:				
Before change.....	278	27.0	37.1	36.0
After change.....	379	16.9	52.0	31.1
Chicago:				
Before change.....	190	31.6	50.0	18.4
After change.....	236	53.0	41.9	5.1
Cleveland:				
Before change.....	93	20.4	77.4	2.2
After change.....	98	27.6	72.4	-----
St. Louis:				
Before change.....	192	51.0	38.5	10.4
After change.....	177	45.8	45.8	8.5
Los Angeles:				
Before change.....	147	45.6	52.4	2.0
After change.....	112	75.9	24.1	-----

Comparative production of operators employed in the same firm in both periods and of all other operators.

As skill was such an important qualification for work on the more expensive dresses, it is interesting to examine the production of operators who evidently were considered satisfactory workers, as they were employed through the period of change or were rehired within the year by the same management, and of those who worked in only one period.

Center	Number of operators	Percent of operators making—		
		Less than 20 dresses	20, less than 40 dresses	40 dresses or more
New York City:				
Operators employed both periods.....	560	0.9	40.5	58.6
Operators not employed both periods.....	147	6.1	46.3	47.6
Eastern Area:				
Operators employed both periods.....	236	1.3	45.3	53.4
Operators not employed both periods.....	98	5.1	51.0	43.9
Boston:				
Operators employed both periods.....	137	28.5	66.4	5.1
Operators not employed both periods.....	66	31.8	60.6	7.6
Philadelphia:				
Operators employed both periods.....	265	16.2	54.3	29.4
Operators not employed both periods.....	147	14.3	53.7	32.0
Chicago:				
Operators employed both periods.....	163	49.1	44.8	6.1
Operators not employed both periods.....	93	50.5	47.3	2.2
Cleveland:				
Operators employed both periods.....	91	38.5	61.5	-----
Operators not employed both periods.....	44	45.5	54.5	-----
St. Louis:				
Operators employed both periods.....	98	34.7	55.1	10.2
Operators not employed both periods.....	104	55.8	39.4	4.8
Los Angeles:				
Operators employed both periods.....	143	46.2	51.7	2.1
Operators not employed both periods.....	166	66.9	32.5	.6
St. Paul and Minneapolis:				
Operators employed both periods.....	57	14.0	84.2	1.8
Operators not employed both periods.....	48	20.8	79.2	-----

The production of operators who were employed in both periods was significantly higher than the other group in New York City, Los Angeles, St. Louis, and the Eastern Area. (See footnote 3, p. 32.) Interestingly enough, the contrast in New York City lies in the larger proportion of operators making as many as 40 dresses and employed in both periods, as compared to those employed in only one period. In Los Angeles and St. Louis the proportion of women in the low production group of less than 20 dresses a week was much higher for all operators combined than for those who worked in both periods; this was also true for those turning out 30 dresses or less a week in the Eastern Area.

These figures on production, though limited in interpretation because of the numerous and unmeasured factors involved, serve to show that undoubtedly there are differences among the six or nine areas in the rate of production, that there has been a slowing down of the weekly rate of production due to the reduction in hours, but due to other factors the decrease in production has not been proportionate to the reduction of hours. For the most part the rate of production of operators who had been employed in both periods is in excess of that of those who had worked in only one.

SPECIAL PRODUCTION RECORDS

A brief study was made by an employers' association in a certain city of the effect of continuous operation on a single model over a period varying from 2 to 4 weeks in the same establishment. A model was given by a jobber to a contractor in sufficient volume to allow continuous operation and a careful record was kept of the output of each operator during the time spent on the given model. The following results show clearly the increase in production when work is on a single model rather than on a variety.

There were 85 operators distributed through 6 shops who worked for 2 consecutive weeks on the same model. During the first week, the largest group, nearly one-half (45.9 percent) produced an average of from $1\frac{3}{4}$ to 2 and less than $2\frac{1}{4}$ dresses an hour. In the second week the largest group of a little more than half the operators averaged from 2 to $2\frac{1}{4}$ and less than $2\frac{1}{2}$ dresses an hour, an increase of one-fourth of a dress per hour. The advantage of working on the same model until one is familiar with it appears to be equally great for the fast and for the slow worker. Average production of less than two dresses an hour was reported by 39 operators, not far from one-half, during the first week's work, while in the second week this average of less than 2 dresses an hour was made by only 13 operators, or 15.3 percent. Many more workers also appeared in the larger production group with an average output of 3 dresses and over in the second week than in the first. Only 2 operators in the early period averaged 3 dresses an hour while in the second period 12 attained this average.

That speed of production probably continues to increase is indicated by the experience of two small shops whose operators worked for 4 consecutive weeks on a given model. During the first week 7 of the 29 operators averaged less than 2 dresses an hour, while records for the fourth week show no worker with such a low production.

The same marked difference between the first and fourth week is shown with average production of three dresses and over. Only 2 operators reported this production during the first week on the model

compared to 18, or more than three-fifths (62.1 percent), during the fourth week. The largest group of workers, 12, produced an average of from 2 to $2\frac{1}{4}$ and less than $2\frac{1}{2}$ garments an hour during the first week. During the fourth week the largest group, 13, produced from 3 to $3\frac{1}{4}$ and less than $3\frac{1}{2}$ an hour, an increase of a dress an hour.

It would appear from these figures that the volume of work on a single model may be one of the most important factors in production and therefore in earnings, as pay increases according to the number of garments produced. For example, in 2 shops 7 of the 29 operators working the 4 consecutive weeks averaged $32\frac{1}{2}$ to 45 cents an hour during the first week and during the fourth week no operator had hourly earnings of less than 50 cents. Average hourly earnings of as much as 80 cents were reported by 1 operator in the first week and by 12 in the fourth. A little over one-half earned from 50 to 65 cents an hour in the first week and the same proportion earned from 75 to 84 cents in the fourth week. These figures indicate the tremendous importance in production of continuous operation on a single model

PIECE PRICES OF OPERATORS ⁴

One of the difficulties found by the dress industry in adjusting to the shorter hours and higher minimum wage established by the union agreement and the code was the setting of piece-rate prices to yield the required weekly wage. In the dress industry the setting of a price on a garment in union shops has long been a matter of bargaining between the management and the workers, and in nonunion shops the price is usually set by the management in consultation with a sample maker. Thus the setting of prices for making a garment depends largely on the equal or unequal strength of the two bargaining powers. The union, realizing the obviously unscientific method of thus setting rates, called in an industrial engineer to make a study of the industry in conjunction with a committee appointed by the union, to discover if possible some method that would at least provide a factual basis from which fair rates might be determined. The system resulting from this study is called the time-unit system and applies to operating and finishing.

In this system the making of a dress is split up into its component parts. Certain of these are common to the manufacture of all dresses—there are 15 possible body combinations which have been studied and their time element determined in advance; these form, of course, only the skeleton of the dress. Different types of sleeves, necks, and trimmings also have been studied and their time determined.

A unit of time is one-tenth of a minute, 10 units a minute, or 600 units an hour. When the units of time have been recorded for each part, the figures are added and the total is the time required by an average skilled operator to make the dress. For example, if the system shows that a dress has 360 units of time, it means that this dress will take 36 minutes to make. The next step is to translate the units into terms of money, and in order to do this it is necessary to determine the money value of the unit: In other words, how many units for 1 cent. From this a piece price is set so as to yield the minimum worker her minimum wage, the average worker her earnings above the minimum, and the fast worker her earnings above the average worker.

⁴ Piece prices were set on the basis of production of the different price garments and, therefore, this section follows production.

These brief statements from the report of the study point to a better method of rate setting than bargaining and also show the need felt by the workers for a more scientific method. To what extent this system has been used cannot be known from any facts in this survey, as the report of the union representative and the engineer was not finished until after the completion of the present study.

The problem of adjusting piece prices to yield an increase in weekly wages with an accompanying decrease in weekly hours presented unusual difficulties. It has already been observed that earnings, both weekly and hourly, showed a marked increase after the change. As operators were paid so much for each dress, it is obvious that the piece price per garment must have been raised considerably in order to yield higher earnings with shorter hours. This increase in piece prices took place everywhere, in all cities and establishments, and, though it is impossible, due to the multiplicity of styles each with its own price, to relate piece prices and earnings in great detail, nevertheless some general facts can be deduced.

DRESSES WHOLESALING AT \$3.75 AND LESS

The earnings of operators making dresses wholesaling at \$3.75 and less showed, for the most part, a much greater increase after the raising of hour and wage standards than did the higher-priced garments, thus pointing to a correspondingly greater increase in piece prices, as hours for the entire industry were shortened equally. In New York City previous to the change all shops making low-priced garments reported a minimum piece price of less than 30 cents for some or all of their operators, and only three reported a maximum price of as much as 30 cents for some of their workers, the highest being 45 cents. The lowest rate in any firm was 6 cents. After the change no shop reported a piece price of less than 30 cents, and in two-fifths of the factories the maximum was 50 cents or over. These prices were planned to yield the code minimum wage of 75 cents an hour.

In the area outside of New York City, before the change, 52 of the 54 shops had a minimum piece price and 48 a maximum piece price of less than 30 cents. After the change only 16 had a minimum and only 4 a maximum below 30 cents. The code minimum wage for this area (Eastern) was 63 cents an hour.

Boston and Philadelphia came within the same code classification, namely, the Eastern Metropolitan Area, with a minimum wage for operators of 90 percent of the New York City figure, or 67½ cents an hour. Before the change all the 12 shops in these two cities reported their lowest piece prices under 30 cents and in 10 of the shops the highest piece prices also were under 30 cents. After the changes only three shops reported minimum prices under 30 cents and only 1 had such a maximum.

In Chicago, before the change, all shops had minimum piece prices below 30 cents and all but one a maximum so low. After the change four of the nine establishments still had a minimum below 30 cents, only two had a maximum below 30. The code minimum here was about the same as in the Eastern Area.

St. Louis, Los Angeles, and St. Paul and Minneapolis had the lowest minimum under the code, 52½ cents an hour. Before the change the four St. Louis shops making low-priced dresses all reported a minimum

for piece prices, and three of them reported a maximum, below 30 cents. After the change no shop had a piece rate below 30 cents, an equally good showing in this respect with New York City and Philadelphia. Before the change two of the seven St. Paul and Minneapolis firms reported a minimum piece price of less than 30 cents, though no firm had such a low maximum. After the change no firm paid less than 30 cents; in fact only one firm reported a price lower than 40 cents.

The list following shows the number of firms in the various cities that paid less than 30 and as much as 40 cents a dress, before and after the agreement, for garments wholesaling at \$3.75 and less.

Locality and whether before or after agreement	Number of firms reporting	Number of firms with—	
		Minimum piece price less than 30 cents	Maximum piece price less than 30 cents
New York:			
Before.....	25	25	22
After.....	25		
Eastern Area:			
Before.....	54	52	48
After.....	54	16	4
Boston:			
Before.....	6	6	6
After.....	6	3	1
Philadelphia:			
Before.....	6	6	4
After.....	6		
Chicago:			
Before.....	9	9	8
After.....	9	4	2
St. Louis:			
Before.....	4	4	3
After.....	4		
St. Paul and Minneapolis:			
Before.....	7	2	
After.....	7		

Locality and whether before or after agreement	Number of firms reporting	Number of firms with—	
		Minimum piece price 40 cents and over	Maximum piece price 40 cents and over
New York City:			
Before.....	25		1
After.....	25	13	19
Eastern Area:			
Before.....	54	2	3
After.....	54	15	36
Boston:			
Before.....	6		
After.....	6		
Philadelphia:			
Before.....	6		2
After.....	6	3	4
Chicago:			
Before.....	9		1
After.....	9	2	6
St. Louis:			
Before.....	4		1
After.....	4	2	4
St. Paul and Minneapolis:			
Before.....	7	3	7
After.....	7	6	17

¹ One firm, \$3.30.

Previous to the change, piece prices of 40 cents or over were found as a minimum in only two centers, the Eastern Area and St. Paul and Minneapolis. After the change, however, all centers but Boston

had some firms with a minimum of 40 cents or above. In New York City, after the change, the minimum was at least 40 cents in about half of the shops, as it was in well over a fourth in the Eastern Area, and in six of the seven shops in the Twin Cities. Maximum prices of 40 cents or more were found both before and after the change in every center but Boston, but with the exception of St. Paul and Minneapolis, the establishments paying these higher prices were more numerous after the change than before.

DRESSES WHOLESALING AT OVER \$3.75

Both before and after the change in rates and hours, piece prices were higher in shops making dresses to wholesale at over \$3.75 than in those making the cheaper dresses. In New York City only 27 of the 58 establishments paid less than 40 cents a dress, even before the change, and afterward no shop reported paying so little. Of the 9 centers included in the study, 3 after the change had minimum piece prices below 40 cents, but the proportion of shops with this minimum was small in each city, only 8 out of 34 in the Eastern Area and 1 each in St. Louis and in St. Paul and Minneapolis. Previous to the change all centers reported minimum piece prices below 40 cents, and in the Eastern Area the proportion of shops with such prices was four-fifths of the total.

The list following shows how many firms paid less than 40 cents for the more expensive dresses:

Locality and whether before or after agreement	Number of firms reporting	Number of firms with—	
		Minimum piece price less than 40 cents	Maximum piece price less than 40 cents
New York City:			
Before.....	58	27	17
After.....	58		
Eastern Area:			
Before.....	34	27	19
After.....	34	8	1
Boston:			
Before.....	19	3	2
After.....	19		
Philadelphia:			
Before.....	18	2	
After.....	18		
Chicago:			
Before.....	23	3	1
After.....	23		
St. Louis:			
Before.....	12	4	1
After.....	12	1	
Los Angeles:			
Before.....	18	3	1
After.....	18		
Cleveland:			
Before.....	11	4	1
After.....	11		
St. Paul and Minneapolis:			
Before.....	7	4	
After.....	7	1	

There was also a marked increase in the number of shops that raised piece prices in the higher ranges. All centers showed a much larger percent of their factories in the second than in the first or early period paying 75 cents and over as the maximum price for making a dress.

In all but one center (St. Paul and Minneapolis) this was true also of the minimum piece price. In New York City the proportion paying 75 cents or more as a maximum was over three-fourths after the change compared to about one-fifth before the change. In the Eastern Area only 3 out of 34 firms paid as much as 75 cents before the change, but a little more than one-half paid such maximum prices afterward.

Locality and whether before or after agreement	Number of firms reporting	Number of firms with—	
		Minimum piece price 75 cents and over	Maximum piece price 75 cents and over
New York City:			
Before.....	58	5	11
After.....	58	25	45
Eastern Area:			
Before.....	34		3
After.....	34	4	18
Boston:			
Before.....	19	1	7
After.....	19	14	16
Philadelphia:			
Before.....	18	3	9
After.....	18	9	17
Chicago:			
Before.....	23	5	16
After.....	23	22	23
St. Louis:			
Before.....	12	2	6
After.....	12	6	10
Los Angeles:			
Before.....	18	4	10
After.....	18	13	17
Cleveland:			
Before.....	11	2	8
After.....	11	10	11
St. Paul and Minneapolis:			
Before.....	7	1	2
After.....	7	1	4

One shop in the Twin Cities had a rate per garment as high as \$3.50 after the change; Cleveland had one as high as \$2.85. It is apparent that the setting of a minimum wage rate not only raised the piece prices in the lower levels but increased the higher prices and the number of shops paying them.

New York City.

In New York City, 58 shops from which figures were obtained were making dresses to wholesale at more than \$3.75. This number is 2½ times that reported in any other city and 1½ times the number reported in the Eastern Area. Because of the greater number of plants in New York, it was possible to divide further the group making dresses to wholesale at over \$3.75. The figures follow:

Wholesale price of dress	Total number of establishments	Number with minimum piece prices below 40 cents before change ¹
\$4.75 and \$5.75.....	14	13
\$6.75 and \$7.75.....	19	9
\$8.75.....	9	1
\$10.75 to \$12.75.....	16	4

¹ After the change no shop had piece prices below 40 cents.

Higher piece prices—50 cents and over—show an even closer relation to the wholesale price of the garment. Before the change the proportion of shops that paid 50 cents or more on some of the styles increased in each division as the wholesale price of the garment increased, so that while only 2 shops out of 14 in the \$4.75 and \$5.75 group had piece prices of 50 cents and over, 13 out of 16 shops are so reported in the \$10.75 to \$12.75 group. After the change, all piece prices were considerably increased and there appears less difference according to wholesale price. However, when piece prices of 75 cents and over are examined the relation is clear. All the shops making dresses to wholesale at \$8.75 and over had some piece prices of 75 cents or more after the change, as had 16 of the 19 shops making \$6.75 and \$7.75 dresses; but on dresses wholesaling at \$4.75 and \$5.75 only 4 out of 14 paid such prices.

OPERATORS IN CONTRACT SHOPS

Although the letting out by the jobber or manufacturer of the making of the dress is not confined to New York and its environs, nevertheless the number of such contract establishments in other cities was too small in each wholesale price to permit comparison. However, the difference in earnings between inside manufacturing shops and contracting shops for New York City will give some idea of how the workers fared in the two types of establishments.

Twenty-three of the 84 firms in New York City included in this survey were contract shops. Fourteen were making dresses that sold for \$3.75 or less; 2, for \$4.75 and \$5.75; and 7, for \$10.75 and \$12.75. None were making dresses that sold at \$6.75, \$7.75, or \$8.75. All were reported to have increased the piece rates to their operators after the agreement by at least 50 percent. Similar increases also were noted in piece rates paid to pressers and finishers.

In the comparison of the weekly earnings of operators in contract shops with the earnings of those in inside shops the 28 firms that made dresses selling for \$6.75, \$7.75, and \$8.75 are omitted, because none of the contract shops were making dresses to sell at these prices.

An examination of the median weekly earnings of operators in contract and inside shops making similar types of dresses indicates much less difference in wages after the agreement than before. Larger proportions in the contract shops than in the inside shops, however, were receiving amounts that were around the minimum. Only a little more than half, 53.9 percent, of those in contract shops making the lowest-priced dresses earned \$25 or more a week after the change, whereas more than three-fourths (78.6 percent) of those in the inside shops earned so much. In the contract and inside shops making dresses to sell for \$4.75 and \$5.75, the proportions earning \$30 or more were one-half and about three-fourths, respectively, and in those whose product sold at \$10.75 and \$12.75 the proportions earning at least \$30 were about 55 percent and 70 percent, respectively.

The difference in median earnings between inside and contract shops was far more marked before the change to uniform hours and a minimum wage standard than afterwards. The following summary shows the difference in median earnings between the two groups before and after the change.

	Difference between medians of operators in contract and inside shops on dresses wholesaling at—		
	\$3.75 and less	\$4.75 and \$5.75	\$10.75 to \$12.75
Before change.....	\$5.70	\$10.80	\$10.65
After change.....	4.35	6.50	4.65

As may be seen from the accompanying table, the proportion of operators in contract shops who had earned very small amounts weekly (less than \$15) was much greater than in inside shops before the change, especially in those shops making the lowest-priced dresses. None of the women in inside shops earned less than \$15 after the agreement, and in the contract shops 3.5 and 1.2 percent, respectively, in the groups making the lowest- and highest-priced dresses and no one in the group making dresses to wholesale at \$4.75 and \$5.75 earned so little.

TABLE 2.—Average weekly earnings of operators before and after the agreement in contract and in inside shops, by wholesale-price group—New York City

Weekly earnings	Operators in firms making dresses to wholesale at—											
	\$3.75 and less				\$4.75 and \$5.75				\$10.75 and \$12.75			
	Before		After		Before		After		Before		After	
	Con- tract	In- side	Con- tract	In- side	Con- tract	In- side	Con- tract	In- side	Con- tract	In- side	Con- tract	In- side
Total.....	230	170	256	187	41	150	40	150	73	154	85	177
Median.....	\$13.40	\$19.10	\$26.00	\$30.35	\$17.20	\$28.00	\$30.00	\$36.50	\$16.10	\$26.75	\$31.40	\$36.05
\$5, under \$10.....	44	4	2	-----	3	2	-----	-----	4	-----	-----	-----
\$10, under \$15.....	104	31	7	-----	10	6	-----	-----	27	6	1	-----
\$15, under \$20.....	55	61	49	2	17	27	5	2	25	20	3	3
\$20, under \$25.....	22	52	60	38	9	29	2	13	8	40	12	13
\$25, under \$30.....	3	12	70	48	1	21	13	20	8	22	21	34
\$30, under \$40.....	2	10	63	74	1	45	17	55	1	40	37	71
\$40, under \$50.....	-----	-----	4	22	-----	17	3	34	-----	21	11	48
\$50 and more.....	-----	-----	1	3	-----	3	-----	26	-----	5	-----	8

Less than 1 in 5 of the finishers in contract shops compared with 1 in 3 of those in inside shops earned more than the minimum set by the agreement. In 8 of the 22 inside shops all finishers earned more than the minimum, whereas only 1 of the 21 contract shops had such a good record. Some of this, no doubt, was due to the practice of dividing the work among more finishers than were necessary to do the work turned out by the operators.

No comparison can be made for pressers, as there are too few figures on which to base conclusions.

PRESSERS

The work of pressing the garment, like that of making it, is performed by both men and women. Men, however, are far more frequently employed for pressing silk dresses than are women. In a few shops men do the heavier and women the lighter pressing, but in most establishments the work is done entirely by one sex or the other.

EARNINGS

In the present study no distinction is made between either the earnings or the production of men and women as the same minimum wage in the code applies to both, and if earnings varied with sex there were also many other factors that influenced earnings. As was the case for operators and finishers, earnings and production of the pressers in this report are divided into two groups, one for dresses wholesaling at \$3.75 and less, and one for dresses wholesaling for more than \$3.75.

DRESSES WHOLESALING AT \$3.75 AND LESS

The number of pressers in a given factory is smaller than the number of operators and in some shops smaller than that of finishers. When, therefore, only a small number of factories manufacturing a certain price garment are found in a given area, there are frequently too few pressers to be significant of conditions in the industry. It was found that in some shops, especially those making the cheaper dresses, payment was on an hourly or weekly basis and therefore their earnings could not be included in a piecework study. For the above reasons only two centers, New York City and the Eastern Area, have figures for pressers on cheaper dresses that could be included in the present report.

The Eastern Area, which includes the cities and towns around New York City and in New Jersey, is the principal center for the manufacture of cheaper dresses. It is composed largely of contract shops where dresses are made for the New York City market and, as a rule, these factories are larger than those manufacturing dresses that are sold directly to the wholesaler or retailer. The shops in New York City are usually smaller than those in the Eastern Area, as is shown by the fact that in 20 plants in New York City the average number of pressers was 2.9 to a shop while in 41 plants in the Eastern Area the average was 7.1.

Average weekly earnings.

The earnings of pressers in the New York plants were considerably higher than were those in the Eastern Area. In the early period, the median of the weekly earnings in New York City was \$30 and in the later period it had increased to \$38.75. In the Eastern Area these respective medians were \$14 and \$23.55. After the change to a 35-hour week and higher rates, nearly one-half of the pressers in New

York earned \$35 but less than \$55 a week while in the Eastern Area over one-half earned \$21 but less than \$35. The higher earnings in New York are again illustrated by the proportion of pressers who earned as much as \$35, 59.2 percent in New York compared to 11.8 in the Eastern Area.

There was not so much difference between the two centers in the proportion of pressers who made less than \$20, as this proportion was only about one-half more in the Eastern Area than in New York.

After the change in hours and rates, median earnings increased in New York a little less than three-tenths and in the Eastern Area a little more than two-thirds. The percent of pressers earning \$35 and more in New York increased from 25 percent in the early period to 59.2 percent in the later period. The increase in the Eastern Area was from 1.8 percent to 11.8 percent. The proportion of pressers that earned less than \$20 decreased about 3 points in New York but as much as 54 points in the Eastern Area.

Average hourly earnings.

Average hourly earnings are based on the actual number of hours worked and are valuable in showing the rate of earnings and in giving a fair basis of comparison between different localities and different periods.

After the change to a 35-hour week, hourly earnings in New York City showed a median of \$1.08 per hour and in the Eastern Area of 75 cents per hour. The difference in these medians for New York and the Eastern Area was considerably greater than the difference in minimum wage rates set by the code and is illustrative of the high earnings in New York, which were in most cases well above the minimum wage set by the code. Median earnings for the Eastern Area were only 5 cents higher than the minimum in the code and one-half of the pressers earned from 60 to 85 cents an hour. In contrast to these earnings the records for New York pressers showed 46.9 percent with hourly earnings of from \$1 to \$1.60; this range being well above the 85 cents provided as a minimum under the code. It must be remembered, however, that the figures for New York City are based on a small number of pressers, only 49, compared to 234 in the Eastern Area, and in all probability they were a more experienced group.

The relative increase in average hourly earnings between the two periods was much greater in the Eastern Area than in New York. In the latter city hourly earnings increased a little more than three-fifths, while in the Eastern Area they almost trebled, from a median in the early period of 28.2 cents to one of 75 cents in the later period.

DRESSES WHOLESALING AT OVER \$3.75

The manufacture of higher-priced garments, ranging from over \$3.75 to \$12.75, was more generally found in the centers visited than were the cheaper garments of \$3.75 and less. Seven of the nine centers reported a sufficient number of pressers with piecework earnings to be included in this report.

Average weekly earnings.

After the change, the highest median of the weekly earnings for pressers (\$47.75) was found in New York, the lowest (\$24.65) in Los Angeles. The four centers, Boston, Philadelphia, Chicago, and the

Eastern Area, reported weekly medians of from \$33.15 in the Eastern Area to \$44.40 in Boston, while medians for both Los Angeles and St. Louis were in the twenties.

A wide range of earnings was reported among the different centers. In Los Angeles one-eighth of the pressers had weekly earnings of less than \$16—one of these earning \$6 and less than \$7 after the change—while in Boston the lowest was between \$30 and \$35, and in the other centers low earnings lay between these two extremes. High earnings of over \$100 a week were reported by one presser in New York City and one in the Eastern Area, while the other centers showed high earnings, ranging from \$50 and less than \$55 in St. Louis to \$90 and less than \$95 in Boston. In spite of the above medians, the largest group of pressers in the various centers showed similarity in their earnings. The New York pressers still had the highest earnings but not so much above pressers in the other centers as were the medians. Boston was closest to New York in the earnings of their major group, and the three cities of Chicago, Los Angeles, and St. Louis resembled each other in the earning range of their principal group, while Philadelphia and the Eastern Area were considerably alike.

Center	Percent in group	Range of average weekly earnings, after change
New York City.....	67.5	\$25, less than \$55.
Eastern Area.....	52.8	\$30, less than \$40.
Boston.....	78.4	\$30, less than \$50.
Philadelphia.....	56.4	\$30, less than \$45.
Chicago.....	60.3	\$25, less than \$40.
St. Louis.....	54.1	\$25, less than \$35.
Los Angeles.....	60.4	\$23, less than \$35.

There is far more variation between the different centers in the proportion of pressers whose earnings were in the lower and higher wage brackets than is shown by the earnings of the major group. In New York and Boston no pressers reported earnings of less than \$25, while in Los Angeles over one-half reported such earnings. In the high-earnings group, about 70 percent of the pressers in New York and Boston earned \$40 and over, while in the Eastern Area only 16 percent and in Los Angeles only 1.9 percent reported such earnings.

Percent of pressers averaging weekly earnings after change of—

	<i>Less than \$25</i>	<i>\$40 and over</i>
New York City.....		70.0
Eastern Area.....	22.6	16.0
Boston.....		70.6
Philadelphia.....	19.8	38.6
Chicago.....	10.8	28.8
St. Louis.....	21.6	16.2
Los Angeles.....	52.8	1.9

Thus for pressers weekly earnings were much the highest in New York and Boston and lowest in Los Angeles.

The difference in earnings between the two periods, one with longer hours and lower rates and the other with the 35-hour week and higher rates, shows increased earnings in all centers, ranging from 69.6 percent in the Eastern Area to 21.1 percent in Boston.

Center	Median of the weekly earnings of pressers		Increase after change	
	Before	After	Amount	Percent
New York City.....	\$35.30	\$47.75	\$12.45	35.3
Eastern Area.....	19.55	33.15	13.60	69.6
Boston.....	36.65	44.40	7.75	21.1
Philadelphia.....	24.35	36.60	12.25	50.3
Chicago.....	29.05	35.65	6.60	22.7
St. Louis.....	20.50	29.05	8.50	41.5
Los Angeles.....	17.10	24.65	7.55	44.2

Previous to the change, weekly earnings were lower in all centers and in three centers, Eastern Area, Los Angeles, and St. Louis, some pressers were reported as earning less than \$5. In New York City, where earnings were highest, one-fifth of the pressers earned less than \$25 before the change while after the change no earnings reached this low level. In all centers the proportion of pressers in the low-earnings group, under \$25, was much smaller in the second period than in the first. Where previous to the change the proportion of pressers earning less than \$25 ranged from 11.4 percent in Boston to 85 percent in Los Angeles, after the change no earnings were reported as low as \$25 in Boston or New York, and with the single exception of Los Angeles, the percent in other centers was less than 23.

Whenever a minimum wage is set, although its effect may be felt by the entire body of workers, the result is most marked in the case of the lowest paid group. In the Eastern Area, St. Louis, and Los Angeles 23.5 percent, 25 percent, and 26.7 percent, respectively, of the pressers earned less than \$12 a week before the change whereas after the change no presser in St. Louis and less than 2 percent in Los Angeles and in the Eastern Area reported this very low wage.

Percent of pressers averaging less than \$25

	<i>Before change</i>	<i>After change</i>
New York City.....	20.7	---
Eastern Area.....	61.4	22.6
Boston.....	11.4	---
Philadelphia.....	52.5	19.8
Chicago.....	30.1	10.8
St. Louis.....	75.0	21.6
Los Angeles.....	85.0	52.8

Before the change, earnings of \$40 and over were found most frequently in Boston and next in New York, while in the other centers less than 10 percent of the pressers earned as much as \$40. After the change, the proportion earning \$40 and over increased in every center excepting Los Angeles, where only two earned this amount before the change and one afterward. The proportion earning this amount increased from 3.8 percent to 38.6 percent in Philadelphia and from 8.7 percent to 28.8 percent in Chicago.

Percent of pressers averaging \$40 and over a week

	<i>Before change</i>	<i>After change</i>
New York City.....	28.0	70.0
Eastern Area.....	4.9	16.0
Boston.....	45.5	70.6
Philadelphia.....	3.8	38.6
Chicago.....	8.7	28.8
St. Louis.....	7.1	16.2
Los Angeles.....	3.3	1.9

Average hourly earnings.

After the change, a general 35-hour week and a minimum wage of \$1 an hour for pressers in New York City was specified under the code. The minimum wage set for all other centers was based on the New York provisions—90 percent of the New York rate for Boston, Philadelphia, and the Eastern Area; 85 percent for Chicago; and 70 percent for Los Angeles and St. Louis. Maximum weekly hours (35) were the same for all localities. If, therefore, all plants in the different centers had worked the maximum of 35 hours, average weekly earnings would have followed the same course as average hourly earnings. In all the centers hourly earnings when converted into weekly earnings for a 35-hour week were higher than the median of the weekly earnings, as shown in this study, due to the undertime worked. After the change, median hourly earnings were highest in New York and lowest in Los Angeles.

Center	Median of the hourly earnings of pressers		Increase after change	
	Before	After	Amount	Percent
	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	
New York City.....	78.1	140.0	61.9	79.3
Eastern Area.....	41.4	98.9	57.5	138.9
Boston.....	91.7	133.0	41.3	45.0
Philadelphia.....	52.5	106.0	53.5	101.9
Chicago.....	66.0	107.0	41.0	62.1
St. Louis.....	46.5	88.1	41.6	89.5
Los Angeles.....	39.2	81.9	42.7	108.9

Four of the seven centers reporting had median earnings of over \$1, and a fifth center, the Eastern Area, had a median of only a little under \$1. Not only were the medians for hourly earnings of the pressers high but in five of the seven centers a large proportion of the pressers, ranging from 48.1 percent to 88.2 percent, showed average hourly earnings of \$1 and over. Earnings did not run so high in Los Angeles and in St. Louis, but even in these cities over half of the pressers, 56.6 percent in Los Angeles and 71 percent in St. Louis, earned 80 cents and over.

Percent with average hourly earnings after change of—

	<i>\$1 and over</i>	<i>80 cents and over</i>
New York City.....	83.8	99.4
Eastern Area.....	48.1	79.2
Boston.....	88.2	100.0
Philadelphia.....	55.4	75.2
Chicago.....	63.3	89.9
St. Louis.....	29.0	71.0
Los Angeles.....	9.4	56.6

The proportion of pressers with comparatively low earnings of less than 50 cents was under 12 percent in 6 centers, 2 of these, New York and Boston, having no average hourly earnings of less than 50 cents. St. Louis, however, reported about one-third with earnings so low.

Percent of pressers averaging less than 50 cents an hour, after change

New York.....	
Eastern Area.....	6.6
Boston.....	
Philadelphia.....	5.9
Chicago.....	2.8
St. Louis.....	32.2
Los Angeles.....	11.3

When medians of the hourly earnings are compared before and after the change the increase in earnings is more marked than when medians of the weekly earnings are compared. In three of the seven centers median hourly earnings more than doubled and in the other centers they increased from 45 percent to 89.5 percent.

Percent increase in medians of hourly earnings, after change

New York.....	79.3
Eastern Area.....	138.9
Boston.....	45.0
Philadelphia.....	101.9
Chicago.....	62.1
St. Louis.....	89.5
Los Angeles.....	108.9

The same decided change in average hourly earnings is observed in the proportion of pressers in the low- and high-earnings groups. Before the change, Boston, with the highest earnings of any locality, reported only two pressers earning less than 50 cents an hour; however, New York City, with next to the highest earnings, reported 14.5 percent with earnings so low. Los Angeles and St. Louis showed at least 70 percent of their pressers with these low earnings. After the change, neither in New York nor in Boston were there any pressers that reported average earnings below 50 cents an hour, and with the single exception of Los Angeles, where 11.3 percent reported these earnings, the other centers each had less than 7 percent of their pressers in this wage group.

Percent of pressers averaging less than 50 cents an hour

	<i>Before change</i>	<i>After change</i>
New York City.....	14.5	---
Eastern Area.....	61.7	6.6
Boston.....	(1)	---
Philadelphia.....	48.8	5.9
Chicago.....	20.4	2.8
St. Louis.....	70.6	3.2
Los Angeles.....	77.6	11.3

At the other end of the wage scale the proportion of pressers increased markedly in the second period. Before the change, two cities, Philadelphia and St. Louis, had no pressers with earnings as high as \$1 an hour. After the change more than half of the pressers in Philadelphia and about three-tenths in St. Louis reported earnings of \$1 and over. In New York the increase was from less than one-fifth to more than four-fifths in the high-earnings group, and in Chicago, where only 1 percent of the pressers before the change earned \$1 and over, after the change 63.3 percent earned this amount. In Boston, where a little over one-third earned \$1 and over before the change, almost nine-tenths earned that much after the change.

¹ 2 pressers.

Percent of pressers averaging \$1 and over an hour

	<i>Before change</i>	<i>After change</i>
New York City.....	18.8	83.0
Eastern Area.....	1.2	48.1
Boston.....	34.1	88.2
Philadelphia.....		55.4
Chicago.....	1.0	63.3
St. Louis.....		29.0
Los Angeles.....	3.4	9.4

WEEKLY PRODUCTION OF PRESSERS**Average weekly production.**

Records of production were obtained in most cases from little books owned and kept by each worker for his own information. Rarely were records kept by the management, and when records were not kept by the pressers or such as were kept were too incomplete to be used no production figures could be obtained. As a result, figures are available for only four cities and the number of pressers even in these four is small. For dresses wholesaling at \$3.75 and less, only New York City and the Eastern Area had enough cases to be tabulated, while for the higher-priced dresses wholesaling at over \$3.75 to \$12.75, production records were available for four centers, New York City, Eastern Area, Philadelphia, and Chicago. In comparing production before and after the change, only such pressers as were in the firms having production records in both periods are included.

The differences among the various centers in the number of garments pressed during a given period depend to a considerable extent on the method of pressing that prevailed in the majority of shops.

If the entire garment is pressed by an iron, it takes longer than if a press is used for the skirt, and likewise the type of iron determines to some extent the speed of pressing. If an electric iron is used, the seams must be opened and dampened and a cloth laid over before pressing, while with a steam iron, where the pressure of a button sprays on the steam, no sponging nor spreading of cloth on the work is necessary. Therefore, although skill and experience always affect output, the equipment and method of work may be equally important factors.

DRESSES WHOLESALING AT \$3.75 AND LESS

The production in the early period, when very long hours were worked, was affected by the fact that in New York City and to a great extent in the Eastern Area the majority of the pressers were men and therefore not subject to the State limitation of hours. With the shortening of the workweek, rates were raised so that, as has been shown, earnings increased but the number of dresses pressed declined. In New York City² more than four-fifths of the pressers averaged at least 400 dresses a week in the early period with the longer week, compared to 250 but less than 550 dresses produced by somewhat more than one-half in the late period with the shorter week. In the Eastern Area production also declined after the change but not to so great a degree as in New York, where, according to statements of employers, more overtime was worked in the early

² Numbers in New York City were small in both periods, 23 in the early and 27 in the later.

period. Before the change about one-third and after the change close to one-half of the pressers in the Eastern Area produced less than 300 dresses.

In the period after the change slightly less than one-fourth of the pressers in New York compared to 12.2 percent in the Eastern Area reported a weekly output of less than 175 dresses, while pressers with a production of 400 dresses and over formed one-third of the group in the Eastern Area and one-half of the group in New York.

It is probably due to the long hours in New York before the union agreement that no presser reported an average production of less than 200 dresses and that more than two-fifths produced 600 dresses and over, while in the Eastern Area one-fourth produced less than 200 and 17.4 percent produced 600 and over.

DRESSES WHOLESALING AT OVER \$3.75

As has already been observed, the earnings of pressers on the higher-priced garments (wholesaling at over \$3.75) were above those of pressers working on dresses wholesaling at \$3.75 and less, due to the higher piece prices on the more expensive garments, which more than compensated for the fewer garments pressed.

In New York City, where the output of pressers was above the average of those in most other centers, one-half of the pressers reported an average of 175 and less than 300 dresses in a 35-hour week, compared to 175 and less than 550 dresses produced by a similar proportion of pressers on the cheaper dresses.

After the change to a 35-hour week, production in New York and in the Eastern Area still exceeded the output of pressers in either Philadelphia or in Chicago, the two other centers for which figures were obtained. In Chicago the production was lowest, no women producing as many as 200 dresses and one-half of the pressers averaging from 80 to less than 125 dresses in a 35-hour week.

Center	Percent of pressers	Dresses produced, after change
New York.....	50.4	175, less than 300.
Eastern Area.....	60.0	150, less than 300.
Philadelphia.....	56.5	150, less than 250.
Chicago.....	50.0	80, less than 125.

Figures for New York show that the proportion whose average production was less than 150 dresses trebled after the change and in Chicago it increased from 72.3 percent to 94.1 percent.

Percent of pressers averaging less than 150 dresses per week

	<i>Before change</i>	<i>After change</i>
New York.....	8.1	24.1
Eastern Area.....	³ 15.4	³ 20.0
Philadelphia.....	³ 31.8	35.1
Chicago.....	³ 72.3	94.1

Not only was there a trend to smaller production in the shorter week but the above figures also emphasize, both in the early and late periods, the wide difference between centers in the proportion of

³ Based on less than 50 cases.

pressers in the low-production groups. A similar difference is illustrated in the high-production groups whose output averaged 250 dresses and over.

Percent averaging 250 dresses and over

	<i>Before change</i>	<i>After change</i>
New York.....	77.5	48.3
Eastern Area.....	⁴ 51.3	⁴ 30.0
Philadelphia.....	⁴ 13.6	5.3
Chicago.....	⁴ 6.4	---

Before the change, over three-fourths of the pressers in New York averaged 250 dresses and over compared to only 6.4 percent of the pressers in Chicago, while after the change no presser in Chicago reported an average of 250 or more dresses and in New York almost half achieved this average.

PIECE PRICES OF PRESSERS

In reviewing the rates paid for pressing a single garment, before and after the code, less variation is found than in the case of operators. This is especially true of the lower-priced dresses.

DRESSES WHOLESALING AT \$3.75 AND LESS

Previous to the change in hours and pay occasioned by the union agreement and code provisions, it was quite unusual to find a company paying as much as 10 cents for pressing a dress. Of a total of 88 factories in 6 centers, only 5 reported a maximum piece price of 10 cents and over, while in 36 shops it was less than 5 cents.

After the change, a piece price of 10 cents and over was reported as the maximum in 42 of the 88 plants, and 28 shops had such a minimum. The number of establishments where less than 5 cents a garment was paid decreased from 36 to 4 shops. The highest piece prices were 20 and less than 30 cents, paid by 3 factories, 1 each in New York, the Eastern Area, and St. Louis.

DRESSES WHOLESALING AT OVER \$3.75

Piece prices were higher for pressing dresses wholesaling for over \$3.75 than for pressing the cheaper dresses, and piece prices for the first named were obtained from more centers. However, much the largest number of shops reported were from New York City and the Eastern Area, where almost half of all establishments making the more expensive dresses were situated.

Before the change, the maximum piece price for any workers was 30 and less than 50 cents and the more usual maximum was below 30 cents, with 95 of the 185 plants reporting a figure below 20 cents. Chicago and Cleveland had the smallest number of shops with a maximum below 20 cents, only 1 plant in each city.

After the change the number of shops paying a maximum of less than 20 cents decreased from 95 to 38, and in the cities of Boston, Cleveland, and Chicago there was no shop reporting such a low maximum.

⁴Based on less than 50 cases.

The numbers of firms paying their pressers a maximum piece rate below 20 cents on the more expensive dresses were as follows:

Locality and whether before or after agreement	Number of firms reporting	Number of firms with maximum piece price of less than 20 cents
New York City:		
Before.....	55	39
After.....	55	15
Eastern Area:		
Before.....	31	26
After.....	31	18
Boston:		
Before.....	18	5
After.....	18	---
Cleveland:		
Before.....	13	1
After.....	13	---
Chicago:		
Before.....	23	1
After.....	23	---
Los Angeles:		
Before.....	14	7
After.....	14	2
St. Louis:		
Before.....	11	3
After.....	11	1
Philadelphia:		
Before.....	17	10
After.....	17	1
St. Paul and Minneapolis:		
Before.....	3	3
After.....	3	1

Piece prices of as much as 50 cents were not paid by any plant before the change, but after the change 29 shops, in 6 of the 9 centers (New York, Boston, Cleveland, Chicago, Los Angeles, and St. Louis), reported such maximum prices. In Boston and Chicago the number of shops paying these higher piece prices was especially large—in Boston 10 of 18 establishments and in Chicago 11 of 23.

FINISHERS

The work of finishing—that is, sewing on snaps, buttons, hooks and eyes, bows, and so forth—is even more varied than that of making a dress. One model may require only a few minutes to finish while another may take 15 or 20 minutes, and yet both models may wholesale for the same price. For this reason no comparison of the piece price per garment or of the number of dresses finished in a week can be made between different centers or between the two periods with different weekly hours. However, the earnings of finishers can be compared both between different centers and between the long and short workweek.

EARNINGS

With finishers as with operators, the minimum wage established either by union agreement or by code varied in the different centers, and without doubt is reflected in earnings. The highest minimum wage, used as a measuring rod for other centers, was set for New York—57 cents an hour for the low-priced dresses of \$3.75 and less and 65 cents for those over \$3.75. For the low-priced garments the minimum for Boston and for Philadelphia was 90 percent and for the Eastern Area 87.7 percent of that for New York. The minimum for Chicago and Cleveland was 85 percent of New York's; for Los Angeles, St. Louis, and St. Paul and Minneapolis 70 percent. The same ratios to the New York minimum were set for the higher-priced dresses with the single exception of the Eastern Area, where the minimum was 90 percent of New York's instead of the 87.7 percent as on the lower-priced dresses.

A much larger group of finishers than of operators were paid on a time basis; that is, by the week or by the hour. The wide variation in the amount of work on a dress and the many different models rendered difficult and expensive the setting of piece rates, so that a straight time rate was found more efficient in many shops. As in this survey the earnings of pieceworkers only were included, it was necessary to exclude those finishers paid on a time basis, thereby considerably reducing the number of finishers included in this study.

DRESSES WHOLESALING AT \$3.75 AND LESS

In the lower-priced group, \$3.75 and less, there were too few finishers paid on a piece basis to justify the tabulation of any localities except New York City and the Eastern Area.

Average weekly earnings.

A comparison of weekly earnings between these two centers after the change shows considerably higher earnings in the larger center, New York, than in the Eastern Area. The number of factories and

the number of finishers were, however, less in New York than in the smaller cities included under the general term, Eastern Area. After the change to a 35-hour week and to higher rates of pay, the median of the weekly earnings for finishers in New York was \$16.30 and for those in the Eastern Area \$13.90, a greater difference between the two areas than the 12.3 points allowed by the code for the minimum wage. There was, however, a much greater difference than the above in New York and the Eastern Area before the change, with a median of \$11.35 for New York and \$6.55 for the Eastern Area.

The increase in weekly earnings between the two periods both in New York and in the Eastern Area is very marked. Previous to the change, nearly two-fifths of the finishers in New York earned less than \$10, while after the change less than one-fifth reported such earnings. In the Eastern Area more than three-fourths of the finishers earned less than \$10 previous to the change and a little over one-fifth afterward. At the high end of the earnings scale, the proportion of finishers in New York that earned \$18 and over increased from 15.2 percent before the change to 36.7 percent after the change, while in the Eastern Area one-fifth earned this amount after the change, compared to only 0.8 percent before the change.

The largest group in New York, 50 percent, the greatest concentration of finishers on less expensive dresses, earned \$6 and less than \$12 before the change and the same proportion earned \$12 and less than \$20 after the change. In the Eastern Area the difference in earnings was even more striking; more than one-half, 53.9 percent, earned less than \$7 previous to the change and 50.7 percent \$10 and less than \$16 after the change.

Average hourly earnings.

After the change, average hourly earnings in New York showed a median of 50.8 cents and in the Eastern Area of 42.8 cents. One-half of the finishers in New York earned an average of from 42 to less than 65 cents an hour, and at each end of the scale—those earning 80 cents and over and those earning less than 22 cents—the proportion of finishers was the same, 10 percent. Hourly earnings of finishers in the Eastern Area showed a much smaller percent with very high and very low earnings, only 1.3 percent and 3.1 percent, respectively, but between these two extremes earnings were fairly well distributed with a little more than half (55.8 percent) earning 36 but less than 55 cents.

As in the case of operators, after the change the median of the hourly earnings of finishers showed a greater increase than was found in the median of the weekly earnings. This was due no doubt to the shortened weekly hours in the latter period, which weights weekly earnings but not hourly earnings. This is illustrated by the fact that the median for hourly earnings more than doubled in New York City while the median weekly earnings increased only 43.6 percent. A marked change occurred also in the low-earnings group whose average hourly earnings were below 20 cents and in the high-earnings group of 48 cents and over. Before the change, over one-third of the finishers in New York City earned less than 20 cents an hour and afterward only 5 percent. An average of 48 cents and over was obtained by only one worker previous to the change, while after the change more than half, 55 percent, reached or exceeded this amount.

Medians of the hourly and weekly earnings

	Before change	After change	Percent increase
New York:			
Hourly median.....	23.8 cents	50.8 cents	113.4
Weekly median.....	\$11.35	\$16.30	43.6
Eastern Area:			
Hourly median.....	13.7 cents	42.8 cents	212.4
Weekly median.....	\$6.55	\$13.90	112.2

In the Eastern Area average hourly earnings increased in the latter period to a far greater degree than in New York because of the very low earnings in the early period. The median of hourly earnings more than trebled, jumping from a median of 13.7 cents to one of 42.8 cents. The low- and high-earnings groups also showed a tremendous change in the period after the agreement became effective. In the early period the average hourly earnings of more than three-fourths, 77.4 percent, of the finishers were less than 20 cents and only two finishers had an average of as much as 36 cents; after the change only four averaged less than 20 cents and almost three-fourths (72.3 percent) averaged 36 cents and over, a striking reversal of earnings.

DRESSES WHOLESALING AT OVER \$3.75

For two reasons the number of finishers on the higher-priced garments wholesaling at over \$3.75 is greater in this survey than on the lower-priced garments. In order to finish a more expensive dress more work is necessary than on the lower-priced dresses, and also the work is more likely to be paid on a piece-rate basis. As this survey was one of pieceworkers only, the latter reason eliminated a considerable number of finishers in the less expensive dress shops where the operators and pressers were on piece rates, but not the finishers.

Average weekly earnings.

For the higher-priced garments it was possible to obtain a sufficient number of finishers to be tabulated in six of the nine centers. The smallest number, 63, reported from any center was from Boston and the largest number, 341, from New York. In a comparison of median earnings of finishers after the change in the different centers, it was found that the highest earnings reported were for New York and the lowest for Los Angeles, while the Eastern Area, Boston, and Philadelphia reported a variation of only 25 cents from the highest to the lowest.

Median of the weekly earnings of finishers on dresses wholesaling at over \$3.75

	Before change	After change
New York.....	\$14.45	\$19.25
Eastern Area.....	8.45	15.55
Boston.....	11.35	15.70
Philadelphia.....	9.55	15.45
Chicago.....	12.25	18.05
Los Angeles.....	8.60	14.15

Previous to the change there was a far greater variation between earnings in the different centers than after the change. The Eastern Area reported the lowest median and New York the highest, while

the other four centers showed a variation from the highest to the lowest of \$3.65. Although the highest median before and after the change was reported for New York, that city experienced the smallest percent of increase, while the greatest change between the two periods took place in the Eastern Area with an increase of 84 percent.

Percent increase in the median of weekly earnings after the change

New York.....	33.2
Eastern Area.....	84.0
Boston.....	38.3
Philadelphia.....	61.8
Chicago.....	47.3
Los Angeles.....	64.5

Although the median gives a condensed picture of the figures and affords a simple method of comparison between different centers and different periods, it does not show the range of earnings nor within what divisions fall the major group of workers. By far the widest distribution of earnings appeared in New York, with about one-tenth of the finishers reporting weekly earnings after the change of less than \$12—three of these earning less than \$5—and a similar proportion \$31 and more, 1 reporting earnings of between \$51 and \$52. The largest group, over one-half, earned \$15 and less than \$24. All other centers reported a much narrower range. The greatest concentration of earnings after the change was somewhere in the group \$12 and less than \$19 in all centers except New York and Chicago.

Major group and range of earnings after change

Center	Percent	Range of major group
New York.....	52.8	\$15 and less than \$24.
Eastern Area.....	61.5	\$12 and less than \$19.
Boston.....	50.8	\$13 and less than \$18.
Philadelphia.....	49.4	\$12 and less than \$17.
Chicago.....	56.1	\$14 and less than \$20.
Los Angeles.....	55.8	\$12 and less than \$16.

If a comparison is made of the change in distribution of earnings between the period before hours were shortened and rates increased and afterward, the result is even more striking than when medians alone are considered. The major group in all the centers showed earnings before the change whose top point was in all but two cases the same as or lower than the bottom one afterward. In the Eastern Area earnings were the lowest before the change, with over half of the finishers earning less than \$9 a week. In Los Angeles the major group earned \$5 and less than \$10 and in Philadelphia \$8 and less than \$12.

Major group and range of earnings before change

Center	Percent	Range of major group
New York.....	51.1	\$9 and less than \$17.
Eastern Area.....	56.7	Less than \$9.
Boston.....	44.8	\$9 and less than \$12.
Philadelphia.....	58.2	\$8 and less than \$12.
Chicago.....	57.4	\$10 and less than \$16.
Los Angeles.....	58.5	\$5 and less than \$10.

In the low-earnings group of less than \$10 a week the smallest percent in any city before the change was in New York, where a fifth of the finishers reported such earnings, and the highest percent (68.3 percent) in Los Angeles. After the change the highest percent was still in Los Angeles, with a little over a tenth, and the lowest, 2.9 percent, in Chicago.

Percent earning less than \$10 weekly

	<i>Before change</i>	<i>After change</i>
New York.....	20.0	5.3
Eastern Area.....	66.0	8.6
Boston.....	31.3	7.9
Philadelphia.....	56.8	6.5
Chicago.....	26.2	2.9
Los Angeles.....	68.3	10.8

When the proportion of finishers in the higher earnings groups of \$20 and over is compared before and after the change, Boston shows the most marked increase. In the period before the change, Boston, also the Eastern Area, reported no finishers with these earnings, and New York was the only city with an appreciable number. After the change, more than a fourth, 28.6 percent, in Boston earned \$20 and over, while in New York 44.9 percent earned such amounts.

Percent earning \$20 and over

	<i>Before change</i>	<i>After change</i>
New York.....	19.0	44.9
Eastern Area.....		14.0
Boston.....		28.6
Philadelphia.....	2.7	21.2
Chicago.....	4.3	28.8
Los Angeles.....	.7	4.2

Average hourly earnings.

After the change, the highest median of hourly earnings, 58 cents, was found in New York, the next highest, 53.8 cents, in Chicago. The other four centers showed a comparatively small variation of 3 cents in their medians, with Philadelphia the lowest at 44.6 cents. With hourly earnings, as with weekly earnings, there was a greater difference in earnings between the various centers before the change than afterward. Los Angeles reported the highest median of hourly earnings, 34.4 cents, before the change and the Eastern Area the lowest, 17.5 cents, while medians for the other four cities were from 20.6 to 30.6 cents.

Medians of average hourly earnings before and after change

	<i>Before change (cents)</i>	<i>After change (cents)</i>
New York.....	30.6	58.0
Eastern Area.....	17.5	46.7
Boston.....	29.6	46.8
Philadelphia.....	20.6	44.6
Chicago.....	27.3	53.8
Los Angeles.....	34.4	47.6

A comparison of the distribution of earnings of finishers in the different earnings groups in the various centers after the change shows a wider range and less concentration around a norm or average

in New York than in the other centers. A little more than half, 51.2 percent, of the finishers in New York earned an average of 50 and less than 75 cents an hour, and in no other center was the range of the major group so high. Workers in Chicago more nearly approached those of New York in their earnings, and the lowest range of earnings for the major group, 34 and less than 48 cents, was found in Philadelphia.

Proportion of finishers in major earnings group after the change

New York.....	51.2 percent earning 50 and less than 75 cents an hour.
Eastern Area.....	55.9 percent earning 40 and less than 59 cents an hour.
Boston.....	49.2 percent earning 44 and less than 59 cents an hour.
Philadelphia.....	53.3 percent earning 30 and less than 48 cents an hour.
Chicago.....	54.0 percent earning 50 and less than 65 cents an hour.
Los Angeles.....	61.3 percent earning 46 and less than 60 cents an hour.

Before the change in hours and rates, Los Angeles reported the highest hourly earnings of 34 and less than 44 cents for their major group. This was considerably above earnings for the largest group in other centers, which as a rule were below 30 cents. The most striking feature of these figures is the very low earnings of the major group in the Eastern Area, less than 14 cents an hour, and the increase after the change to 40 and less than 59 cents an hour.

Average hourly earnings show a much greater increase after the change to shorter hours and higher rates than do weekly earnings. The medians of average hourly earnings increased in every center but Los Angeles far more than did the median of the average weekly earnings. In the Eastern Area and in Philadelphia hourly earnings increased over 100 percent while weekly earnings in those two centers rose 84 and 61.8 percent, respectively. In Los Angeles, the only city where weekly earnings increased more than hourly earnings, it is probable that undertime was worked to a considerable extent in the early period so that, when the 35-hour week became the standard, hours worked may have actually increased rather than decreased.

Percent increase in the median of hourly earnings and in the median of weekly earnings after the change

	<i>Average hourly earnings</i>	<i>Average weekly earnings</i>
New York.....	89.5	33.2
Eastern Area.....	166.9	84.0
Boston.....	58.1	38.3
Philadelphia.....	116.5	61.8
Chicago.....	97.1	47.3
Los Angeles.....	38.4	64.5

The higher earnings resulting from the union agreement and the code are also illustrated by the decrease in the number of finishers in the lower-earnings group after the change and the increase in the higher-earnings groups. Previous to the change every center reported some finishers with average hourly earnings of less than 16 cents, the proportion with such earnings varying with the locality, from 5.6 percent in Los Angeles to 40.5 percent in the Eastern Area. After the change only two centers reported any finishers earning less than 16 cents and in both of these, the Eastern Area and Philadelphia, there was only one such worker.

Percent of finishers before and after the change with hourly earnings of less than 16 cents

	Before change	After change
New York.....	8.2	-----
Eastern Area.....	40.5	10.5
Boston.....	9.0	-----
Philadelphia.....	19.2	1.6
Chicago.....	9.4	-----
Los Angeles.....	5.6	-----

¹ 1 finisher.

In the high-earnings group whose hourly average was 60 cents and over after the change, every center was represented. The smallest percent of finishers, 5.9 percent, with such earnings was found in Los Angeles and the largest, 45.8 percent, in New York. In the early period before the change only one center, New York, reported any finishers with an average of 60 cents and over and the number was small, only 5.9 percent.

Percent of finishers before and after the change with hourly earnings of 60 cents and over

	Before change	After change
New York.....	5.9	45.8
Eastern Area.....	-----	14.5
Boston.....	-----	19.0
Philadelphia.....	-----	21.6
Chicago.....	-----	34.5
Los Angeles.....	-----	5.9

APPENDIXES

A—GENERAL TABLES

B—SCHEDULE FORMS

Appendix A.—GENERAL TABLES

TABLE I.—Average weekly earnings of operators before and after the union agreement and the code—6 centers

NEW YORK CITY

Average weekly earnings ¹	Dresses wholesaling at—							
	\$3.75 and less				Over \$3.75			
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	400	100.0	443	100.0	928	100.0	955	100.0
Median earnings ²	\$15.75		\$27.60		\$23.15		\$34.75	
Less than \$5								
\$5, less than \$10	48	12.0	2	.5	10	1.1		
\$10, less than \$15	135	33.8	7	1.6	90	9.7	3	.3
\$15, less than \$20	116	29.0	51	11.5	213	23.0	24	2.5
\$20, less than \$25	74	18.5	98	22.1	211	22.7	78	8.2
\$25, less than \$30	15	3.8	118	26.6	147	15.8	197	20.6
\$30, less than \$35	10	2.5	92	20.8	114	12.3	182	19.1
\$35, less than \$40	2	.5	45	10.2	73	7.9	166	17.4
\$40, less than \$50			26	5.9	59	6.4	193	20.2
\$50, less than \$60			4	.9	11	1.2	93	9.7
\$60 and more							19	2.0

EASTERN AREA

Total	1,686	100.0	1,847	100.0	783	100.0	856	100.0
Median earnings ²	\$11.90		\$19.10		\$13.35		\$22.25	
Less than \$5	22	1.3			10	1.3	1	.1
\$5, less than \$10	481	28.5	76	4.1	142	18.1	8	.9
\$10, less than \$15	840	49.8	327	17.7	357	45.6	72	8.4
\$15, less than \$20	274	16.3	625	33.8	183	23.4	220	25.7
\$20, less than \$25	60	3.6	496	26.9	68	8.7	310	36.2
\$25, less than \$30	7	.4	219	11.9	14	1.8	183	21.4
\$30, less than \$35	1	.1	80	4.3	6	.8	45	5.3
\$35, less than \$40	1	.1	17	.9	2	.3	17	2.0
\$40, less than \$50			6	.3	1	.1		
\$50, less than \$60			1	.1				

BOSTON

Total	77	100.0	89	100.0	268	100.0	294	100.0
Median earnings ²	\$13.05		\$15.50		\$15.00		\$19.70	
Less than \$5					1	.4		
\$5, less than \$10	14	18.2	10	11.2	39	14.6		
\$10, less than \$15	49	63.6	28	31.5	94	35.1	27	9.2
\$15, less than \$20	11	14.3	32	36.0	101	37.7	128	43.5
\$20, less than \$25	1	1.3	16	18.0	26	9.7	80	27.2
\$25, less than \$30	2	2.6	3	3.4	6	2.2	46	15.6
\$30, less than \$35					1	.4	11	3.7
\$35, less than \$40							2	.7

PHILADELPHIA

Total	147	100.0	147	100.0	430	100.0	513	100.0
Median earnings ²	\$10.45		\$19.15		\$18.50		\$28.65	
Less than \$5					1	.2		
\$5, less than \$10	67	45.6			37	8.6	3	.6
\$10, less than \$15	46	31.3	24	16.3	99	23.0	20	3.9
\$15, less than \$20	17	11.6	63	42.9	111	25.8	62	12.1
\$20, less than \$25	16	10.9	43	29.3	94	21.9	91	17.7
\$25, less than \$30			10	6.8	58	13.5	111	21.6
\$30, less than \$35			4	2.7	16	3.7	120	23.4
\$35, less than \$40			3	2.0	10	2.3	58	11.3
\$40, less than \$50	1	.7			4	.9	46	9.0
\$50, less than \$60							2	.4

See footnotes at end of table.

TABLE I.—Average weekly earnings of operators before and after the union agreement and the code—6 centers—Continued

CHICAGO								
Average weekly earnings ¹	Dresses wholesaling at—							
	\$3.75 and less				Over \$3.75			
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	152	100.0	165	100.0	538	100.0	499	100.0
Median earnings ²	\$10.75		\$18.20		\$14.50		\$21.75	
Less than \$5.....	5	3.3			3	.6		
\$5, less than \$10.....	57	37.5	8	4.8	58	10.8	8	1.6
\$10, less than \$15.....	59	38.8	36	21.8	236	43.9	41	8.2
\$15, less than \$20.....	21	13.8	49	29.7	174	32.3	134	26.9
\$20, less than \$25.....	10	6.6	53	32.1	46	8.6	168	33.7
\$25, less than \$30.....			14	8.5	16	3.0	97	19.4
\$30, less than \$35.....			4	2.4	3	.6	31	6.2
\$35, less than \$40.....			1	.6	1	.2	16	3.2
\$40, less than \$50.....					1	.2	4	.8

ST. LOUIS								
Average weekly earnings ¹	Dresses wholesaling at—							
	\$3.75 and less				Over \$3.75			
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	96	100.0	118	100.0	257	100.0	236	100.0
Median earnings ²	\$11.00		\$19.15		\$10.65		\$18.50	
Less than \$5.....	3	3.1			9	3.5		
\$5, less than \$10.....	36	37.5	1	.8	100	38.9	5	2.1
\$10, less than \$15.....	46	47.9	20	16.9	125	48.6	37	15.7
\$15, less than \$20.....	10	10.4	48	40.7	22	8.6	112	47.5
\$20, less than \$25.....	1	1.0	39	33.1	1	.4	74	31.4
\$25, less than \$30.....			9	7.6			7	3.0
\$30, less than \$35.....			1	.8			1	.4

¹ Earnings for 4 weeks were copied for each operator, and the average per week for each individual is shown.

² Median earnings computed on \$1 intervals.

TABLE II.—Average weekly earnings of operators on dresses wholesaling at over \$3.75 before and after the union agreement and code—Cleveland, Los Angeles, and St. Paul and Minneapolis

Average weekly earnings	Cleveland				Los Angeles				St. Paul and Minneapolis				
	Before change		After change		Before change		After change		Before change		After change		
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	
	Total.....		152		182		480		396		115		106
Median earnings ¹	\$12.80		\$27.35		\$11.85		\$17.85		\$11.50		\$18.20		
Less than \$5.....					7	1.5			2	1.7			
\$5, less than \$10.....	30	19.7	3	1.6	158	32.9	11	2.8	42	36.5	1	.9	
\$10, less than \$15.....	84	55.3	8	4.4	189	39.4	99	25.0	48	41.7	20	18.9	
\$15, less than \$20.....	26	17.1	16	8.8	85	17.7	136	34.3	21	18.3	52	49.1	
\$20, less than \$25.....	9	5.9	34	18.7	25	5.2	102	25.8	2	1.7	31	29.2	
\$25, less than \$30.....	2	1.3	66	36.3	10	2.1	37	9.3			2	1.9	
\$30, less than \$35.....	1	.7	42	23.1	3	.6	8	2.0					
\$35, less than \$40.....			8	4.4	3	.6	3	.8					
\$40, less than \$50.....			5	2.7									

¹ Median computed on \$1 intervals.

TABLE III.—Average hourly earnings of operators before and after the union agreement and the code—6 centers

NEW YORK CITY								
Average hourly earnings	Dresses wholesaling at—							
	\$3.75 and less				Over \$3.75			
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	396	100.0	443	100.0	893	100.0	955	100.0
Median earnings..... cents.....	32.7		81.4		49.8		102.0	
Less than 20 cents.....	31	7.8			7	.8		
20, less than 22 cents.....	23	5.8			5	.6		
22, less than 24 cents.....	31	7.8			2	.2		
24, less than 26 cents.....	25	6.3	1	.2	14	1.6		
26, less than 28 cents.....	28	7.1			23	2.6		
28, less than 30 cents.....	20	5.1	1	.2	20	2.2		
30, less than 32 cents.....	25	6.3	1	.2	28	3.1		
32, less than 34 cents.....	46	11.6	1	.2	30	3.4		
34, less than 36 cents.....	15	3.8			23	2.6		
36, less than 38 cents.....	19	4.8			45	5.0	1	.1
38, less than 40 cents.....	14	3.5	1	.2	44	4.9		
40, less than 50 cents.....	77	19.4	18	4.1	210	23.5	9	.9
50, less than 60 cents.....	27	6.8	37	8.4	157	17.6	13	1.4
60, less than 70 cents.....	6	1.5	54	12.2	90	10.1	38	4.0
70, less than 80 cents.....	7	1.8	96	21.7	90	10.1	94	9.8
80, less than 90 cents.....	2	.5	82	18.5	53	5.9	148	15.5
90 cents, less than \$1.....			62	14.0	38	4.3	150	15.7
\$1, less than \$1.10.....			34	7.7	9	1.0	127	13.3
\$1.10, less than \$1.20.....			27	6.1	3	.3	102	10.7
\$1.20, less than \$1.30.....			14	3.2			66	6.9
\$1.30, less than \$1.40.....			7	1.6			68	7.1
\$1.40, less than \$1.50.....			4	.9	2	.2	57	6.0
\$1.50, less than \$1.60.....			3	.7			30	3.1
\$1.60, less than \$1.75.....							36	3.8
\$1.75, less than \$2.....							15	1.6
\$2, less than \$2.25.....							1	.1

EASTERN AREA

Average hourly earnings	EASTERN AREA							
	\$3.75 and less		Over \$3.75		\$3.75 and less		Over \$3.75	
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	1,667	100.0	1,847	100.0	776	100.0	854	100.0
Median earnings..... cents.....	24.0		61.4		27.8		69.8	
Less than 20 cents.....	475	28.5			148	19.1	1	.1
20, less than 22 cents.....	171	10.3			62	8.0	1	.1
22, less than 24 cents.....	188	11.3	1	.1	64	8.2		
24, less than 26 cents.....	168	10.1	4	.2	70	9.0		
26, less than 28 cents.....	166	10.0	9	.5	50	6.4	2	.2
28, less than 30 cents.....	124	7.4	8	.4	76	9.8	2	.2
30, less than 32 cents.....	98	5.9	5	.3	57	7.3	1	.1
32, less than 34 cents.....	68	4.1	25	1.4	44	5.7	2	.2
34, less than 36 cents.....	45	2.7	15	.8	35	4.5	6	.7
36, less than 38 cents.....	45	2.7	26	1.4	33	4.3	5	.6
38, less than 40 cents.....	33	2.0	44	2.4	26	3.4	10	1.2
40, less than 42 cents.....	26	1.6	36	1.9	22	2.8	16	1.9
42, less than 44 cents.....	21	1.3	45	2.4	17	2.2	14	1.6
44, less than 46 cents.....	10	.6	60	3.2	17	2.2	10	1.2
46, less than 48 cents.....	11	.7	94	5.1	18	2.3	23	2.7
48, less than 50 cents.....	10	.6	88	4.8	12	1.5	14	1.6
50, less than 55 cents.....	5	.3	177	9.6	12	1.5	60	7.0
55, less than 60 cents.....	1	.1	222	12.0	4	.5	76	8.9
60, less than 65 cents.....			233	12.6	3	.4	91	10.7
65, less than 70 cents.....	1	.1	198	10.7	3	.4	98	11.5
70, less than 75 cents.....			172	9.3	2	.3	104	12.2
75, less than 80 cents.....			129	7.0			97	11.4
80, less than 85 cents.....	1	.1	89	4.8	1	.1	66	7.7
85, less than 90 cents.....			66	3.6			50	5.9
90, less than 95 cents.....			46	2.5			31	3.6
95 cents, less than \$1.....			20	1.1			28	3.3
\$1, less than \$1.10.....			24	1.3			30	3.5
\$1.10, less than \$1.20.....			3	.2			12	1.4
\$1.20, less than \$1.30.....			1	.1			2	.2
\$1.30, less than \$1.40.....			5	.3			1	.1
\$1.40, less than \$1.50.....							1	.1
\$1.50, less than \$1.60.....			1	.1				
\$1.60, less than \$1.75.....			1	.1				

TABLE III.—Average hourly earnings of operators before and after the union agreement and the code—6 centers—Continued

BOSTON

Average hourly earnings	Dresses wholesaling at—							
	\$3.75 and less				Over \$3.75			
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	77	100.0	89	100.0	268	100.0	292	100.0
Median earnings, cents.....	31.2		49.3		37.0		60.8	
Less than 20 cents.....	3	3.9	2	2.2	17	6.3		
20, less than 22 cents.....	7	9.1	2	2.2	8	3.0		
22, less than 24 cents.....	3	3.9	2	2.2	9	3.3		
24, less than 26 cents.....	6	7.8			5	1.9		
26, less than 28 cents.....	6	7.8	3	3.4	14	5.2		
28, less than 30 cents.....	7	9.1	1	1.1	11	4.1		
30, less than 32 cents.....	11	14.3	1	1.1	12	4.5	1	.3
32, less than 34 cents.....	7	9.1	3	3.4	24	9.0	3	1.0
34, less than 36 cents.....	10	13.0	2	2.2	24	9.0	3	1.0
36, less than 38 cents.....	5	6.5	7	7.9	20	7.5	1	.3
38, less than 40 cents.....	3	3.9	3	3.4	29	10.8	2	.7
40, less than 42 cents.....	2	2.6	5	5.6	23	8.6	4	1.4
42, less than 44 cents.....	1	1.3	4	4.5	16	6.0	6	2.1
44, less than 46 cents.....	2	2.6	5	5.6	16	6.0	12	4.1
46, less than 48 cents.....	1	1.3	2	2.2	11	4.1	12	4.1
48, less than 50 cents.....			4	4.5	6	2.2	14	4.8
50, less than 55 cents.....	1	1.3	7	7.9	8	3.0	44	15.1
55, less than 60 cents.....			5	5.6	8	3.0	40	13.7
60, less than 65 cents.....	1	1.3	7	7.9	4	1.5	24	8.2
65, less than 70 cents.....	1	1.3	10	11.2	1	.4	23	7.9
70, less than 75 cents.....			3	3.4	1	.4	22	7.5
75, less than 80 cents.....			2	2.2	1	.4	29	9.9
80, less than 85 cents.....			4	4.5			22	7.5
85, less than 90 cents.....			2	2.2			10	3.4
90, less than 95 cents.....			1	1.1			9	3.1
95 cents, less than \$1.....			1	1.1			6	2.1
\$1, less than \$1.10.....			1	1.1			5	1.7

PHILADELPHIA

Average hourly earnings	147	100.0	146	100.0	430	100.0	513	100.0
Total.....	147	100.0	146	100.0	430	100.0	513	100.0
Median earnings, cents.....	21.4		53.7		39.4		82.4	
Less than 20 cents.....	57	38.8			32	7.4	1	.2
20, less than 22 cents.....	24	16.3			12	2.8		
22, less than 24 cents.....	12	8.2			16	3.7		
24, less than 26 cents.....	8	5.4			15	3.5	1	.2
26, less than 28 cents.....	4	2.7			29	6.7	1	.2
28, less than 30 cents.....	7	4.8	2	1.4	16	3.7		
30, less than 32 cents.....	7	4.8	2	1.4	21	4.9		
32, less than 34 cents.....	12	8.2	7	4.8	14	3.3	1	.2
34, less than 36 cents.....	6	4.1	1	.7	14	3.3	2	.4
36, less than 38 cents.....			4	2.7	33	7.7	1	.2
38, less than 40 cents.....	2	1.4	4	2.7	18	4.2	9	1.8
40, less than 42 cents.....	1	.7	1	.7	22	5.1	2	.4
42, less than 44 cents.....	1	.7	3	2.1	24	5.6	8	1.6
44, less than 46 cents.....	3	2.0	5	3.4	24	5.6	5	1.0
46, less than 48 cents.....	1	.7	11	7.5	15	3.5	10	1.9
48, less than 50 cents.....			8	5.5	31	7.2	7	1.4
50, less than 55 cents.....	1	.7	34	23.3	42	9.8	24	4.7
55, less than 60 cents.....			21	14.4	17	4.0	30	5.8
60, less than 65 cents.....			16	11.0	15	3.5	29	5.7
65, less than 70 cents.....			8	5.5	3	.7	32	6.2
70, less than 75 cents.....			8	5.5	7	1.6	35	6.8
75, less than 80 cents.....			3	2.1	7	1.6	41	8.0
80, less than 85 cents.....	1	.7	3	2.1			37	7.2
85, less than 90 cents.....					2	.5	37	7.2
90, less than 95 cents.....			3	2.1			36	7.0
95 cents, less than \$1.00.....					1	.2	48	9.4
\$1, less than \$1.10.....			1	.7			49	9.6
\$1.10, less than \$1.20.....			1	.7			26	5.1
\$1.20, less than \$1.30.....							13	2.5
\$1.30, less than \$1.40.....							13	2.5
\$1.40.....							15	2.9

TABLE III.—Average hourly earnings of operators before and after the union agreement and the code—6 centers—Continued

CHICAGO

Average hourly earnings	Dresses wholesaling at—							
	\$3.75 and less				Over \$3.75			
	Before agreement		After agreement		Before agreement		After agreement	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	152	100.0	163	100.0	531	100.0	499	100.0
Median earnings, cents.....	22.8		57.3		31.8		68.2	
Less than 20 cents.....	51	33.6			34	6.4		
20, less than 22 cents.....	18	11.8			25	4.7		
22, less than 24 cents.....	18	11.8	1	.6	32	6.0		
24, less than 26 cents.....	9	5.9	1	.6	45	8.5		
26, less than 28 cents.....	9	5.9	2	1.2	36	6.8		
28, less than 30 cents.....	7	4.6			42	7.9		
30, less than 32 cents.....	11	7.2	3	1.8	58	10.9		
32, less than 34 cents.....	4	2.6	3	1.8	50	9.4		
34, less than 36 cents.....	4	2.6	3	1.8	29	5.5		
36, less than 38 cents.....	6	3.9	4	2.5	35	6.6	1	.2
38, less than 40 cents.....	4	2.6	2	1.2	31	5.8	2	.4
40, less than 42 cents.....	2	1.3	7	4.3	19	3.6	3	.6
42, less than 44 cents.....	5	3.3	5	3.1	22	4.1	8	1.6
44, less than 46 cents.....	1	.7	6	3.7	17	3.2	4	.8
46, less than 48 cents.....	1	.7	10	6.1	8	1.5	14	2.8
48, less than 50 cents.....	1	.7	5	3.1	8	1.5	9	1.8
50, less than 55 cents.....	1	.7	20	12.3	14	2.6	52	10.4
55, less than 60 cents.....			21	12.9	14	2.6	54	10.8
60, less than 65 cents.....			19	11.7	6	1.1	67	13.4
65, less than 70 cents.....			22	13.5	1	.2	56	11.2
70, less than 75 cents.....			16	9.8	1	.2	53	10.6
75, less than 80 cents.....			5	3.1	2	.4	57	11.4
80, less than 85 cents.....			3	1.8	1	.2	43	8.6
85, less than 90 cents.....			4	2.5			24	4.8
90, less than 95 cents.....					1	.2	16	3.2
95 cents, less than \$1.00.....							12	2.4
\$1, less than \$1.10.....							13	2.6
\$1.10, less than \$1.20.....			1	.6			10	2.0
\$1.20 and more.....							1	.2

ST. LOUIS

Average hourly earnings	84	100.0	118	100.0	227	100.0	229	100.0
Total.....	84	100.0	118	100.0	227	100.0	229	100.0
Median earnings, cents.....	24.9		57.5		23.5		55.1	
Less than 20 cents.....	21	25.0			66	29.1		
20, less than 22 cents.....	5	6.0			29	12.8		
22, less than 24 cents.....	9	10.7			25	11.0		
24, less than 26 cents.....	15	17.9			21	9.3		
26, less than 28 cents.....	11	13.1			23	10.1		
28, less than 30 cents.....	8	9.5			26	11.5		
30, less than 32 cents.....	4	4.8			8	3.5		
32, less than 34 cents.....	4	4.8			11	4.8	2	.9
34, less than 36 cents.....	3	3.6	2	1.7	10	4.4	2	.9
36, less than 38 cents.....	2	2.4	1	.8	3	1.3	3	1.3
38, less than 40 cents.....			4	3.4	3	1.3	5	2.2
40, less than 42 cents.....	1	1.2	3	2.5	1	.4	14	6.1
42, less than 44 cents.....			1	.8			9	3.9
44, less than 46 cents.....	1	1.2	2	1.7			9	3.9
46, less than 48 cents.....			6	5.1	1	.4	18	7.9
48, less than 50 cents.....			4	3.4			14	6.1
50, less than 55 cents.....			15	12.7			38	16.6
53, less than 55 cents.....			7	5.9				
55, less than 60 cents.....			28	23.7			30	13.1
60, less than 65 cents.....			24	20.3			47	20.5
65, less than 70 cents.....			9	7.6			23	10.0
70, less than 75 cents.....			4	3.4			10	4.4
75, less than 80 cents.....			1	.8			3	1.3
80, less than 85 cents.....			4	3.4			1	.4
85, less than 90 cents.....			1	.8			1	.4
90, less than 95 cents.....			1	.8				
95 cents, less than \$1.....			1	.8				

TABLE IV.—Average hourly earnings of operators on dresses wholesaling at over \$3.75, before and after the union agreement and code—Cleveland, Los Angeles, and St. Paul and Minneapolis

Average hourly earnings	Cleveland				Los Angeles				St. Paul and Minneapolis			
	Before change		After change		Before change		After change		Before change		After change	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	150	100.0	182	100.0	478	100.0	394	100.0	115	100.0	106	100.0
Median earnings, cents	31.1		80.0		34.7		64.6		33.8		57.5	
Less than 20 cents	16	10.7			73	15.3			26	22.6		
20, less than 22 cents	7	4.7			22	4.6			7	6.1		
22, less than 24 cents	11	7.3			26	5.4						
24, less than 26 cents	14	9.3			10	2.1			1	.9		
26, less than 28 cents	14	9.3			15	3.1			4	3.5		
28, less than 30 cents	6	4.0			23	4.8	2	.5	2	1.7		
30, less than 32 cents	13	8.7	2	1.1	25	5.2	1	.3	7	6.1		
32, less than 34 cents	15	10.0			32	6.7	1	.3	12	10.4		
34, less than 36 cents	14	9.3	2	1.1	87	18.2	1	.3	16	13.9	1	.9
36, less than 38 cents	9	6.0	1	.5	50	10.5			7	6.1		
38, less than 40 cents	8	5.3	2	1.1	21	4.4	2	.5	12	10.4		
40, less than 42 cents	5	3.3	1	.5	20	4.2	10	2.5	7	6.1	1	.9
42, less than 44 cents	4	2.7	1	.5	14	2.9	11	2.8	6	5.2	4	3.8
44, less than 46 cents	2	1.3	1	.5	10	2.1	11	2.8	3	2.6	3	2.8
46, less than 48 cents	1	.7	2	1.1	6	1.3	13	3.3	2	1.7	8	7.5
48, less than 50 cents	4	2.7	3	1.6	6	1.3	12	3.0			8	7.5
50, less than 55 cents	2	1.3	2	1.1	13	2.7	31	7.9	2	1.7	21	19.8
55, less than 60 cents	2	1.3	5	2.7	14	2.9	33	8.4	1	.9	14	13.2
60, less than 65 cents	1	.7	11	6.0	2	.4	78	19.8			32	30.2
65, less than 70 cents	1	.7	15	8.2	4	.8	81	20.6			9	8.5
70, less than 75 cents	1	.7	16	8.8	1	.2	41	10.4			4	3.8
75, less than 80 cents			27	14.8	2	.4	27	6.9			1	.9
80, less than 85 cents			27	14.8	1	.2	16	4.1				
85, less than 90 cents			18	9.9	1	.2	10	2.5				
90, less than 95 cents			21	11.5			4	1.0				
95 cents, less than \$1.00			8	4.4			5	1.3				
\$1.00 and more			17	9.3			4	1.0				

Appendix B.—SCHEDULE FORMS

SCHEDULE I

[This schedule was used for the interviews with employers as to method of pay, piece rates, scheduled hours, etc.]

U. S. DEPARTMENT OF LABOR
WOMEN'S BUREAU

1. Firm _____ Address _____
2. Product _____ 3. Material _____ Price _____
4. Person interviewed _____ Early _____
- Position _____ Late _____
5. EARLY pay period dates: _____ 6. LATE pay period dates: _____
7. No. emp.—M _____ W _____ Total _____ M _____ W _____ Total _____
8. Hours¹—B _____ E _____ L _____ T _____ B _____ E _____ L _____ T _____
- Sat.—B _____ E _____ L _____ T _____ B _____ E _____ L _____ T _____
- Days per week _____ Wkly. hours _____ Days per wk. _____ Wkly. hrs. _____
9. Operations, method of pay and piece rates: _____

Early Late

10. Reason above pay-roll weeks were selected _____
11. Busy season (months) _____
Slack season (months) _____
12. Union shop _____ How long _____
13. Shop overall _____
14. Notes _____

Agent _____ Date _____

¹ Begin, end, lunch, total.

SCHEDULE II

[This schedule was used for recording pay-roll data]

U. S. DEPARTMENT OF LABOR
WOMEN'S BUREAU

City..... Agent.....
Name..... Firm..... Date.....
Operation..... Product..... Grade.....

Date (week end)			
Week's earnings			
Hours worked			
Production and rate			

Scheduled weekly hours.....
Total hours worked..... Average hourly earnings.....
Total earnings..... Average hourly production.....
Total production..... Average piece rate.....



10. Reason above pay-roll weeks were selected.....

11. Busy season (months).....

Slack season (months).....

12. Union shop..... How long.....

13. Shop over.....

14. Notes.....

Date..... Agent.....

Begin end, lunch, rest.....

PAMPHLET