
UNITED STATES DEPARTMENT OF LABOR
Frances Perkins, Secretary
BUREAU OF LABOR STATISTICS
Isador Lubin, Commissioner

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Earnings and Hours in the Hat Industries, 1939

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Prepared by the
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Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., October 18, 1939.

The SECRETARY OF LABOR:

Transmitted herewith is a report on Earnings and Hours in the Hat Industries, 1939. This study was made by the Division of Wage and Hour Statistics of the Bureau of Labor Statistics.

ISADOR LUBIN, *Commissioner.*

Hon. FRANCES PERKINS,
Secretary of Labor.

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PREFACE

This is the first survey of earnings and hours in the hat industries conducted by the Bureau of Labor Statistics. The survey was made at the request of the Wage and Hour Division, in order to furnish information for the use of Industry Committee No. 4, which was appointed by the Wage and Hour Administrator to recommend minimum wage rates under the provisions of the Fair Labor Standards Act.

In carrying on the field work and preparing the report the Bureau followed its regular procedure for making such surveys. The Bureau is also adhering strictly to its usual practice of respecting the confidential nature of all data supplied by individual establishments.

The Bureau wishes to express its appreciation for the cordial cooperation given by the numerous employers who supplied the information upon which this report is based. The organizations of both employers and workers were also very helpful in giving much-needed advice and in expediting the survey.

The survey was made under the supervision of J. Perlman, Chief of the Division of Wage and Hour Statistics of the Bureau of Labor Statistics. H. E. Riley was in charge of the survey, and was assisted by Dorothy S. Smith.

ISADOR LUBIN,
Commissioner of Labor Statistics.

SEPTEMBER 15, 1939.

Earnings and Hours in the Hat Industries, 1939

Summary

The average hourly earnings of all wage earners in the fur-felt hat industry amounted to 66.3 cents in the early part of 1939. Workers in the wool-felt hat industry averaged 49.8 cents, while employees in straw hat establishments earned 49.1 cents on the average, and workers in plants manufacturing hat materials had average hourly earnings of 55.2 cents.

Hourly earnings differ substantially between males and females and among workers of various skills in each industry. In the fur-felt hat industry, skilled males averaged 85.5 cents an hour, as compared with 62.8 cents for skilled females. Among the semiskilled workers the average was 58.6 cents for males and 48.8 cents for females. Unskilled males averaged 42.3 cents, as against 38.6 cents for unskilled females. No skilled females were employed in the plants covered by the survey of the wool-felt hat industry. Hourly earnings of skilled males averaged 66.3 cents. Among the semiskilled workers the averages were 48.6 cents for males and 43.2 cents for females. For the unskilled employees the respective averages were 41.7 and 40.3 cents.

Earnings in the straw hat industry averaged 74.7 cents an hour for skilled males and 49.7 cents for skilled females. Among the semiskilled workers the respective averages were 45.5 cents and 40.9 cents. Unskilled males averaged 30.5 cents, as compared with 31.4 cents for unskilled females.

In the hat materials plants the earnings of males and females respectively were 82.1 and 51.4 cents for skilled, 64.9 and 40.7 cents for semiskilled, and 45.5 and 36.8 cents for unskilled workers.

The actual workweek averaged 37.2 hours in the fur-felt hat industry, as compared with 39.0 hours in wool-felt hats, 41.2 hours in straw hats, and 37.8 hours in plants producing hat materials.

Weekly earnings of all workers in the fur-felt hat industry averaged \$24.69. Employees of wool-felt hat plants averaged \$19.46 a week, while workers in straw hat establishments received \$20.20 a week and employees of hat materials plants averaged \$20.89 a week.

This information was secured in a survey of the hat industry recently completed by the Bureau of Labor Statistics.

Scope of Survey

In determining the scope of this survey, the Bureau of Labor Statistics followed the definition of the hat industries as adopted by the Wage and Hour Administrator, which includes: "(a) The manufacture from any material of headwear for men or boys, except caps and cloth hats; (b) the manufacture of felt hat bodies from fur or wool for men's, boys', women's, or children's hats; and (c) the manufacture or processing of hatters' furs."

The principal products covered by this definition are fur- and wool-felt hats, men's sewed-braid and woven-body dress straw hats, harvest and beach hats, silk and opera hats, and hatters' fur. At the request of the Wage and Hour Division, the Bureau's survey was extended to include establishments making hat materials other than hatters' fur. Accordingly, the report contains data on the manufacture of hat leathers, linings, and bands, in addition to the items covered by the above definition.

In other words, this report covers four industries manufacturing, respectively, fur-felt hats, wool-felt hats (including bodies for men's, women's, and children's hats and finished men's hats), men's straw hats (including dress straw hats, harvest, and beach hats), and hat materials.

It should be pointed out that these industries are distinct from each other in many respects.

Thus, as between the wool-felt and fur-felt branches, the manufacturing processes vary to a considerable degree, requiring different types of equipment. Furthermore, the greater part of the wool-felt bodies are sold to the millinery trade, to be made into women's hats, whereas a majority of the fur-felt bodies are used for men's hats.

Although a number of plants make both felt and straw hats, the operations on the two products, with the occasional exception of trimming, are invariably carried on in separate departments. As the subsequent analysis reveals, straw-hat manufacture differs from other types of hat production in nearly every important respect.

Likewise, the manufacture of hat materials bears little resemblance to the processes in any of the hat industries. Most of the hat materials are made in independent plants that specialize in these products. Although some of the large companies process fur for their own use, these operations are carried on in separate departments and may be clearly distinguished from the hat-making processes.

In view of the distinctive characteristics exhibited by each of the four industries covered by the survey, it appears that a combination of the data might result only in obscuring important facts. Accordingly, the earnings and hours figures for each industry have been analyzed separately.

Methods of Collecting and Analyzing Data

In terms of wage earners, the survey covered approximately one-half of the fur-felt hat industry and virtually 100 percent of the wool-felt hat, straw hat, and hat-materials industries.

The sample in the fur-felt branch was carefully selected to give adequate representation with respect to all significant characteristics of the industry, such as geographical location, size of plant, size of community, corporate affiliation, and type of establishment. The coverage included all of the large companies. In order to avoid overweighting the sample with large companies, however, only one-half of the employees in the fur-felt departments of their establishments were included in the tabulation. This was done by taking a 50-percent cross section of each occupation and sex among the workers in these departments.

The wages and hours data were copied from the company pay-roll records by the Bureau field representatives, who also interviewed plant officials to obtain additional information covering occupational descriptions, employer-employee dealings, methods of wage payment, etc. Furthermore, the plant supervisors in the various establishments were asked to designate the degree of skill required in each occupation. This information, together with detailed descriptions of the several occupations, was used in making the skill classifications given in this report. The data cover all occupations, including working supervisors and factory clerks, but exclude the central office employees and higher plant supervisors. For each wage earner scheduled, the Bureau obtained the occupational title, sex, color,¹ method of wage payment, and number of hours actually worked and total earnings during one pay-roll period.²

A pay-roll period in the months of February and March was taken for the great majority of the fur- and wool-felt hat factories and hat-materials establishments. The data for a majority of the plants making straw hats covered a pay-roll period in February, March, or April.

The Fair Labor Standards Act provides that employees working in excess of 44 hours per week shall receive time and a half for overtime.³ In obtaining the data, the earnings at regular rates of pay were separated from the extra overtime earnings. The hourly and weekly

¹ The number of colored workers was not sufficient to justify separate tabulation.

² In case the pay-roll period exceeded 1 week, the schedule also showed the number of hours worked during 1 continuous week within the pay-roll period. With this information, the Bureau was able to present weekly hours, as well as to compute weekly earnings, for all employees.

³ Some of the establishments covered by the survey paid extra rates for time worked beyond 40 hours per week.

earnings used in this report are based on regular rates only. This method of presentation, which is contrary to the usual Bureau practice, was necessitated by the fact that the data are to be used by the Wage and Hour Division in connection with minimum-wage recommendations. As a subsequent analysis shows, however, the exclusion of extra earnings for overtime changed the averages only slightly.

Manufacture of Fur-Felt Hats

Analysis of Sample

According to the Census of Manufactures, the fur-felt hat industry in 1937 included 140 establishments having an annual product valued at \$5,000 or more. The average monthly employment in these plants during the year amounted to 15,926 wage earners.

It was the intention of the Bureau in making the survey to include 50 percent of the industry, taking only plants employing over 20 wage earners. According to the Census of Manufactures, there were 91 establishments with 15,488 workers in this category in 1937. The coverage of the survey, however, included 52 plants and 7,182 wage earners. It will be observed that this is more than 50 percent of the establishments but less than one-half of the workers reported by the census. The difference in number of plants covered is due primarily to the fact that the survey included all of the large establishments, taking approximately one-half of the employees in each one, as previously mentioned. In terms of wage earners, the sample included 46.4 percent of the total shown by the Census of Manufactures for plants having over 20 wage earners in 1937. The index of employment in the fur-felt hat industry, as compiled by the Bureau of Labor Statistics, indicates that the number of wage earners in the industry declined by 12.5 percent between 1937 and the first quarter of 1939. Considering this as well as other factors involved, it would seem that the survey included about 50 percent of the wage earners employed in the industry during the period covered.

The fur-felt hat industry has three types of establishments, namely, independent rough-body plants (back shops), independent finishing plants (front shops), and integrated plants. In the back shop are performed operations involved in producing the rough hat bodies. These are sold to the front shops in which the rough body receives the finishing operations. The integrated establishments combine both back- and front-shop operations.

The integrated group is represented in the survey by 13 establishments, in which 3,803 wage earners were scheduled, or 53.0 percent of the total coverage. Outstanding among the integrated plants are some fairly large companies, whose products include nearly every item covered by the industry definition. In addition to the output of men's fur-felt hats, for which they are best known, several of the integrated establishments make women's fur-felt hats and account for a large proportion of the production of sewed-braid and woven-body dress straw hats. Several integrated plants also process hatters' fur and some make their own sweat bands, linings, and other trimmings. Most

of the output of the back-shop departments in integrated establishments is consumed by their own front shops, although many of the smaller companies sell a substantial proportion of their products as rough hats. On the other hand, the integrated establishments may occasionally buy bodies in the market to supplement the output of their own back shops.

The survey covered 9 independent fur-felt back shops, employing 1,101 wage earners. The products of these plants include rough bodies for both men's and women's hats. The remainder of the coverage consisted of 2,278 wage earners, employed in 28 independent front shops and 2 fur-felt finishing departments in plants engaged primarily in making straw hats. These establishments purchase their basic raw materials in the form of rough hat bodies, most of which come from the independent back shops. Some of the smaller shops in this group, as previously noted, also process made-over hats.

Silk and opera hats were included in the survey, but the wage earners employed in the manufacture of these products were too few to justify the presentation of separate figures. Moreover, the operations in silk- and opera-hat manufacture differ to such an extent from those employed on other types of hats that the data could not be combined with any other figures, and figures for silk and opera hats are therefore not given in this report.

The survey also included some figures covering the processing (i. e., cleaning, reblocking, and trimming) of made-over fur-felt hats, for resale. Here again the number of workers in these activities was too small for separate tabulation. However, as most of the made-over-hat plants are also engaged in finishing hats from purchased rough bodies, they have all been included with the fur-felt finishing shops.

As shown by table 1, the leading States in fur-felt hat manufacture are Connecticut, Pennsylvania, New York, and New Jersey. The geographical distribution of the industry varies, however, for the different types of establishments. Thus, virtually all of the integrated plants are found in Connecticut and Pennsylvania. Likewise, Connecticut contains most of the independent back shops. Thus, most of the fur-felt hat bodies used by the men's hat and millinery industries are made in these two States. Because of the concentration of integrated plants, Connecticut and Pennsylvania are also foremost in the finishing of men's fur-felt hats. Nevertheless, a substantial proportion of the independent front-shop operations is found in other areas, particularly in and near the New York metropolitan district. Some of the independent front shops are also scattered throughout the country, nearly every geographical region being represented in the total.

Most of the fur-felt hat plants are located in large metropolitan areas. One-half of the 52 establishments covered by the survey, with

over half (52.9 percent) of the workers scheduled, were found in places of over 1,000,000 population.⁴ There were 10 plants, with 15.2 percent of the workers, scattered in communities ranging from 100,000 to 1,000,000, while 16 establishments and 31.9 percent of the wage earners were in places of under 50,000 population. Virtually all of the plants in the latter group were found in the Danbury-Bethel area of Connecticut.

TABLE 1.—Coverage of survey in fur-felt hat industry, by State, 1939

State	Number of plants	Workers	
		Number	Percentage of total
All States.....	52	7, 182	100. 0
Connecticut.....	17	3, 131	43. 7
Massachusetts.....	3	361	5. 0
New Jersey.....	6	677	9. 4
New York.....	13	748	10. 4
Pennsylvania.....	4	1, 676	23. 3
Other States ¹	9	589	8. 2

¹ Includes 1 plant each in the States of California, Indiana, Kentucky, Maryland, Minnesota, Texas, and Washington, and 2 in Missouri.

As measured by total employment, the fur-felt hat plants included in the survey varied widely, some having over 1,000 workers. None of the integrated plants had fewer than 50 employees, and all but 4 of the 13 establishments employed over 250 wage earners. Among the independent plants, the back shops were on the average considerably larger than the front shops. Thus, on the basis of the number of employees working on fur-felt hats only, the back shops averaged 122 workers, as compared with 76 workers in the front shops. In both groups there were a few establishments that had over 500 employees. In some of these plants, however, most of the workers were engaged primarily in making other products, such as straw or wool-felt hats.

Trade-union organization is quite extensive in the fur-felt hat industry. Of the 52 establishments covered by the survey, 23, in which 3,220 wage earners were scheduled, had agreements with the United Hatters, Cap, and Millinery Workers' International Union, which is the only labor organization in the industry. The union is industrial in character, including virtually all of the direct occupations, and is affiliated with the American Federation of Labor.

Composition of Labor Force

Over three-fourths (77.7 percent) of the workers in the fur-felt hat industry, as a whole, are males. Skilled workers constituted 47.6 percent of the labor force, while about two-fifths (38.5 percent) were

⁴ The metropolitan area, as used in this survey, includes not only the population of the principal political subdivisions but also that of nearby areas that form part of the same labor market.

in semiskilled occupations and over one-eighth (13.9 percent) were classed as unskilled employees (table 2).

The distribution of workers by sex and skill varies to a marked degree, however, between the back shops and the front shops. The felting, blocking, and pouncing operations, which make up most of the back-shop processes, require considerable physical effort and involve continuous exposure to high temperatures, dust, and hot water. As most of these jobs are unsuitable for women, very few are employed in the back shops; women formed only 2.0 percent of the labor force in integrated, and 3.7 percent in independent back shops.

Not only are many of the hat body-making operations heavy and disagreeable, but they also require a high degree of skill. Over three-fifths of the workers (63.0 percent in integrated and 61.4 percent in independent back shops) were classed as skilled. The proportions of semiskilled and unskilled workers were about equal in the integrated back shops. In the independent back shops, however, only 15.3 percent of the workers were semiskilled, while 23.3 percent were in unskilled occupations.

Although a majority of the front-shop employees are men, substantial proportions of women are employed, especially for the various operations in hat trimming. As shown by table 2, about one-third of the front-shop employees are women, the proportions amounting to 33.6 percent in the integrated and 37.6 percent in the independent establishments.

TABLE 2.—*Distribution of workers covered in survey of fur-felt hat industry, by type of plant, skill, and sex, 1939*

Type of plant	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male
All plants.....	7, 182	5, 578	1, 604	3, 420	3, 247	173	2, 765	1, 517	1, 248	997	814	183
Back shops.....	2, 910	2, 833	77	1, 817	1, 817	-----	511	497	14	582	519	63
Front shops.....	4, 272	2, 745	1, 527	1, 603	1, 430	173	2, 254	1, 020	1, 234	415	295	120
Integrated plants.....	3, 803	3, 097	706	1, 839	1, 761	78	1, 380	861	519	584	475	109
Back shops.....	1, 809	1, 773	36	1, 141	1, 141	-----	343	341	2	325	291	34
Front shops.....	1, 994	1, 324	670	698	620	78	1, 037	520	517	259	184	75
Independent back shops.....	1, 101	1, 060	41	676	676	-----	168	156	12	257	228	29
Independent front shops.....	2, 278	1, 421	857	905	810	95	1, 217	500	717	156	111	45
Percentage distribution												
All plants.....	100.0	77.7	22.3	47.6	45.2	2.4	38.5	21.1	17.4	13.9	11.4	2.5
Back shops.....	100.0	97.4	2.6	62.4	62.4	-----	17.6	17.1	.5	20.0	17.9	2.1
Front shops.....	100.0	64.3	35.7	37.5	33.5	4.0	52.8	23.9	28.9	9.7	6.9	2.8
Integrated plants.....	100.0	81.4	18.6	48.4	46.3	2.1	36.2	22.6	13.6	15.4	12.5	2.9
Back shops.....	100.0	98.0	2.0	63.0	63.0	-----	19.0	18.9	.1	18.0	16.1	1.9
Front shops.....	100.0	66.4	33.6	35.0	31.1	3.9	52.0	26.1	25.9	13.0	9.2	3.8
Independent back shops.....	100.0	96.3	3.7	61.4	61.4	-----	15.3	14.2	1.1	23.3	20.7	2.6
Independent front shops.....	100.0	62.4	37.6	39.8	35.6	4.2	53.4	21.9	31.5	6.8	4.9	1.9

Over one-half (52.8 percent) of the employees in the finishing plants were classed as semiskilled, while nearly two-fifths (37.5 percent) were skilled and one-tenth (9.7 percent) were unskilled workers. However, the skill distribution varied considerably between the two sexes. Of the total males, 52.1 percent were skilled, 37.2 percent semiskilled, and 10.7 percent unskilled. On the other hand, only 11.3 percent of all females were skilled and 7.9 percent were unskilled, while 80.8 percent were in semiskilled occupations.

Average Hourly Earnings

Piece workers were found in every fur-felt hat plant covered by the survey. For the industry as a whole, 57.7 percent of the employees scheduled were paid on a straight piece-rate basis. The number of employees under production-bonus system was relatively small, namely 4.3 percent of the total, as this method of wage payment was in effect in only three establishments. The principal direct occupations were usually on straight piece rates, while supervisors, helpers, and indirect workers were paid straight-time rates.

TABLE 3.—Percentage distribution of fur-felt hat workers, by average hourly earnings, skill, and sex, 1939

Average hourly earnings (in cents)	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Under 25.0.....	0.3	0.2	0.8	-----	-----	-----	0.3	0.3	0.2	1.7	0.9	5.5
Exactly 25.0.....	2.6	2.1	4.2	0.1	(1)	0.6	4.1	4.0	4.3	6.8	6.8	7.1
25.1 and under 27.5.....	1.7	.5	1.4	(1)	(1)	-----	1.5	1.5	1.6	.5	.4	1.1
27.5 and under 30.0.....	.2	.8	2.5	.1	0.1	1.7	2.3	1.8	2.8	1.9	2.1	1.1
30.0 and under 32.5.....	1.7	1.2	3.6	.4	.3	.6	3.1	2.9	3.4	2.4	1.2	7.8
32.5 and under 35.0.....	1.4	.9	2.9	.2	.2	1.2	2.5	1.8	3.3	2.1	2.2	1.6
35.0 and under 37.5.....	5.3	4.7	7.6	.9	.7	4.0	6.0	5.7	6.4	18.6	18.4	19.1
37.5 and under 40.0.....	2.8	1.9	5.9	.4	.4	1.7	4.3	2.4	6.6	6.5	6.9	4.9
40.0 and under 42.5.....	5.6	4.7	8.4	1.0	.8	4.6	5.9	4.7	7.4	20.4	20.4	19.1
42.5 and under 47.5.....	6.3	4.5	12.5	2.0	1.6	9.2	9.4	7.1	11.9	12.5	11.1	19.1
47.5 and under 52.5.....	6.7	5.4	10.9	2.7	2.5	5.2	9.7	7.1	12.7	12.1	13.9	4.4
52.5 and under 57.5.....	6.0	5.4	8.2	4.1	3.8	8.7	8.6	8.3	9.0	5.7	6.4	2.7
57.5 and under 62.5.....	7.4	6.7	10.1	5.8	5.3	15.1	11.1	11.6	10.1	3.5	3.1	5.5
62.5 and under 67.5.....	6.0	5.6	7.3	5.4	5.1	9.2	7.7	7.5	8.0	3.1	3.7	.5
67.5 and under 72.5.....	5.5	6.0	3.8	8.0	8.0	8.1	3.9	4.1	3.8	1.2	1.5	-----
72.5 and under 77.5.....	4.7	5.0	3.7	6.4	6.4	5.8	4.2	4.5	3.8	.6	.6	.5
77.5 and under 82.5.....	5.2	6.2	1.7	8.5	8.7	4.6	2.9	4.0	1.6	.2	.2	-----
82.5 and under 87.5.....	4.3	5.1	1.4	7.1	7.2	5.8	2.3	3.4	1.0	.1	.1	-----
87.5 and under 92.5.....	6.1	7.7	.6	9.6	10.1	2.3	4.0	7.0	.4	-----	-----	-----
92.5 and under 100.0.....	5.7	7.0	1.1	10.5	10.8	5.2	1.8	2.8	.7	-----	-----	-----
100.0 and under 110.0.....	7.8	9.9	.8	13.8	14.5	4.0	3.2	5.5	.5	-----	-----	-----
110.0 and under 120.0.....	3.3	4.2	.2	6.3	6.6	1.2	.8	1.3	.1	-----	-----	-----
120.0 and under 130.0.....	1.5	1.9	.2	3.0	3.1	.6	.2	.2	.2	.1	.1	-----
130.0 and under 140.0.....	.8	1.0	.1	1.5	1.6	-----	.1	.1	.2	-----	-----	-----
140.0 and under 150.0.....	.4	.5	-----	.8	.8	-----	(1)	.1	-----	-----	-----	-----
150.0 and over.....	.7	.9	.1	1.4	1.4	.6	.1	.3	-----	-----	-----	-----
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Less than 1/10 of 1 percent.

Individual hourly earnings covered a wide range, as the effective limits of the distribution shown in table 3 are 25 cents and \$1.20 an hour. In fact, the data were so widely dispersed that virtually no

central tendency is evident. Thus, the 5-cent interval having the largest concentration (37.5 to 42.5 cents) contained but 8.4 percent of the workers, while from about 4 to 7 percent of the wage earners were found in each 5-cent class from 42.5 to 92.5 cents. There was a minor concentration (2.6 percent) at exactly 25 cents. The proportion averaging under 35 cents amounted to only 7.9 percent of the total. About one-seventh (14.5 percent) of the workers received \$1 and over, but only 3.4 percent averaged \$1.20 and over.

Variations by Sex and Skill

The wide dispersion of hourly earnings in the fur-felt hat industry is partly a reflection of variations in earnings by sex and skill. The male employees (who make up over three-fourths of the labor force) averaged 71.2 cents an hour, as against only 49.1 cents for the females (table 4). Among the males, the skilled workers averaged 85.5 cents, as compared with 58.6 cents for the semiskilled and 42.3 cents for the unskilled employees. Of the females, the relatively numerous semiskilled workers averaged 48.8 cents, as against 62.8 cents and 38.6 cents, respectively, for the small number of skilled and unskilled employees.

TABLE 4.—Average hourly earnings in fur-felt hat industry, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All plants.....	\$0. 663	\$0. 712	\$0. 491	\$0. 543	\$0. 855	\$0. 628	\$0. 513	\$0. 586	\$0. 488	\$0. 417	\$0. 423	\$0. 386
Back shops.....	. 753	. 767	. 405	. 907	. 907	. 907	. 638	. 642	(1)	. 438	. 443	. 396
Front shops.....	. 603	. 660	. 496	. 778	. 796	. 628	. 523	. 501	. 488	. 388	. 391	. 381
Integrated plants.....	. 734	. 776	. 546	. 909	. 918	. 697	. 634	. 686	. 546	. 455	. 458	. 441
Back shops.....	. 785	. 792	. 432	. 928	. 928	. 928	. 660	. 661	(1)	. 458	. 461	. 428
Front shops.....	. 691	. 757	. 552	. 880	. 902	. 697	. 626	. 699	. 547	. 451	. 452	. 446
Independent back shops..	. 714	. 726	. 380	. 872	. 872	. 872	. 597	. 607	(1)	. 412	. 419	. 358
Independent front shops..	. 529	. 572	. 453	. 609	. 714	. 575	. 438	. 425	. 448	. 293	. 298	. 280

¹ Number of workers not sufficient to justify computation of an average.

A striking feature of the distributions by skill and sex is the large concentration of skilled males in the upper earnings brackets. Thus, nearly one-half (48.9 percent) of the workers in this group earned 87.5 cents or more an hour. In comparison, the proportion receiving 87.5 cents or more amounted to 13.9 percent for the skilled females and 17.3 percent for the semiskilled males, while for the semiskilled females and the unskilled workers of both sexes the number was negligible. The contrast in the lower wage brackets was equally striking. Among the skilled workers, less than 1 percent of the males and only 4.1 percent of the females averaged under 35 cents an

hour. On the other hand, the proportions in that category included 12.3 percent of the semiskilled males, 15.6 percent of the semiskilled females, 13.6 percent of the unskilled males, and 24.2 percent of the unskilled females.

Variations by Type of Plant

The differences in average hourly earnings between back shops and front shops shown in table 4 are partly explained by variations in the composition of the labor force. As previously pointed out, a very high proportion of the employees in back shops were males, whereas a substantial number of females were employed in the front shops. In addition, skilled workers make up a much higher percentage of the working force in back shops than in front shops.

Even on the basis of skill and sex groups, hourly earnings are usually higher in the back shops than in the front shops. This is especially true of the independent establishments.⁵ It may be explained partly by the fact that work in the back shops is somewhat more arduous than in the front shops, as pointed out before.

In the integrated establishments, skilled males averaged 92.8 cents an hour in back shops, as compared with 90.2 cents in front shops, a difference of 2.6 cents. For unskilled males, the respective averages are 46.1 and 45.2 cents, which is a difference of only 0.9 cent. In each case, the difference between the averages in the back and front shops is considerably less for integrated than for independent establishments. Furthermore, the averages of some skill-sex groups in the integrated establishments are found to be higher in the front shops than in the back shops. The semiskilled males, for example, averaged 69.9 cents in the front shops, as against 66.1 cents in the back shops. Likewise, the unskilled females received 44.6 cents in the front shops, as compared with 42.8 cents in the back shops. The somewhat different situation in integrated as compared with independent establishments is probably due to variations in plant organization. Thus, it was found in some cases that the integrated plants carried on certain activities in their front shops that are ordinarily part of the back-shop operations in independent establishments. Such a practice would naturally tend to bring about an equality of hourly earnings as between back and front shops of integrated establishments.

Comparison of the averages as between integrated and independent establishments shows that in every case the figure is higher in the former than in the latter for both back and front shops. The highest averages are shown for the back shops in integrated establishments. The average hourly earnings in integrated front shops, moreover, are not only higher than those in independent front shops, but they also

⁵ The average in these plants for all females is higher in the front shops than in the back shops. This is due to the fact that the front shops employ a large number of skilled and semiskilled females, whereas virtually all of the females in back shops are in unskilled occupations.

exceed the averages of the independent back shops for each skill-sex group.⁶ These differences are probably due to the fact that the integrated plants are relatively much larger than the independent establishments. This aspect of the analysis cannot be developed in greater detail because of the limited amount of data.

Table 5 shows the distributions of hourly earnings for all wage earners by type of plant.⁷

TABLE 5.—Percentage distribution of fur-felt hat workers, by average hourly earnings and by type of plant, 1939

Average hourly earnings	All plants			Integrated plants			Independent plants	
	Total	Back shops	Front shops	Total	Back shops	Front shops	Back shops	Front shops
Under 25.0 cents.....	0.3		0.6					1.1
Exactly 25.0 cents.....	2.6	(1)	4.3	0.1	0.1	0.1		7.8
25.1 and under 27.5 cents.....	.7		1.1	.1		.2		2.0
27.5 and under 30.0 cents.....	1.2	0.3	1.8	.3	.1	.5	0.7	3.0
30.0 and under 32.5 cents.....	1.7	.4	2.6	.5	.1	.8	.9	4.2
32.5 and under 35.0 cents.....	1.4	.4	2.0	.3	.1	.5	.9	3.4
35.0 and under 37.5 cents.....	5.3	4.8	5.7	4.0	3.5	4.4	6.8	6.8
37.5 and under 40.0 cents.....	2.8	2.3	3.1	1.7	1.3	2.0	4.1	4.0
40.0 and under 42.5 cents.....	5.6	4.8	6.0	5.9	5.1	6.6	4.4	5.5
42.5 and under 47.5 cents.....	6.3	5.2	7.0	5.9	5.7	6.2	4.4	7.8
47.5 and under 52.5 cents.....	6.7	5.4	7.5	6.1	4.6	7.5	6.6	7.6
52.5 and under 57.5 cents.....	6.0	4.8	6.9	3.0	5.3	6.6	4.0	7.1
57.5 and under 62.5 cents.....	7.4	6.5	8.2	8.4	6.5	10.1	6.4	6.4
62.5 and under 67.5 cents.....	6.0	4.5	7.0	5.0	3.5	8.1	6.1	6.0
67.5 and under 72.5 cents.....	5.5	5.8	5.3	5.1	5.6	4.6	6.0	6.0
72.5 and under 77.5 cents.....	4.7	4.9	4.6	4.8	4.7	5.0	5.2	4.3
77.5 and under 82.5 cents.....	5.2	7.3	3.8	5.9	7.8	4.2	6.4	3.4
82.5 and under 87.5 cents.....	4.3	5.5	3.5	4.7	5.2	4.2	5.9	2.9
87.5 and under 92.5 cents.....	6.1	5.5	6.6	8.1	5.8	10.1	5.0	3.3
92.5 and under 100.0 cents.....	5.7	8.5	3.8	6.8	9.1	4.8	7.6	2.9
100.0 and under 110.0 cents.....	7.8	11.8	5.1	10.2	12.8	7.9	10.6	2.7
110.0 and under 120.0 cents.....	3.3	5.1	2.1	4.3	5.6	3.1	4.2	1.1
120.0 and under 130.0 cents.....	1.5	2.6	.7	2.1	2.9	1.3	2.0	.3
130.0 and under 140.0 cents.....	.8	1.4	.3	1.2	1.9	.6	.6	.1
140.0 and under 150.0 cents.....	.4	.8	.1	.7	1.1	.3	.2	
150.0 cents and over.....	.7	1.4	.3	.9	1.6	.3	1.0	.3
Total.....	100.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Less than 1/10 of 1 percent.

Earnings in Relation to Fair Labor Standards Act

A 25-cent minimum hourly wage rate for establishments engaged in interstate commerce became effective on October 24, 1938, under the provisions of the Fair Labor Standards Act. This minimum will be advanced to 30 cents on October 24, 1939. The act further provides means by which the minimum may be raised in the meantime to a level not exceeding 40 cents an hour.

⁶ The average hourly earnings of all workers in integrated front shops were slightly lower than the average for all employees of independent back shops. This is due to the fact that the labor force in the independent back shops contained a high proportion of skilled workers, most of whom are males, whereas the integrated front shops employ a substantial number of semiskilled workers and females.

⁷ Although some geographical differences may exist, a detailed examination of the data indicates that type of plant is probably more important than mere geographical location. It should be pointed out that only a small portion of the industry is located in the South.

An analysis of the original data shows that average hourly earnings were usually higher in the plants having union agreements than in those without such contracts. Because of the limited number of establishments in the industry, it is impossible to present the data supporting this conclusion.

As indicated in table 3, the number of workers receiving less than the 25-cent minimum was insignificant, amounting to only 0.3 percent of the total labor force. There was, however, a definite grouping at exactly 25 cents an hour, which is limited to the semiskilled and unskilled workers, among whom the proportion receiving this wage ranged from 4.0 percent for the semiskilled males to 7.1 percent for the unskilled females.

The industry apparently will have little difficulty in meeting the 30-cent minimum, as indicated by the fact that only 4.8 percent of the workers are now averaging less than that figure. The effects of this minimum will also be confined almost entirely to the semiskilled and unskilled workers, of whom the proportions averaging under 30 cents amounted to 8.2 and 10.9 percent, respectively.

The number of workers paid under 40 cents an hour amounted to about one-sixth (16.0 percent) of the total labor force. Relatively few of the skilled workers averaged under this figure, the proportions being 1.7 percent of the males and 9.8 percent of the females. Among the semiskilled and unskilled employees a very substantial percentage had average hourly earnings of less than 40 cents, the proportions ranging from 20.4 percent for semiskilled males to 48.2 percent for unskilled females.

The number of workers averaging under 30 cents an hour was significant only in the independent front shops, in which 13.9 percent of the employees earned less than that figure. The proportion of workers averaging under 40 cents was 7.0 percent in integrated plants, 13.4 percent in independent back shops, and 32.3 percent in the independent front shops.

Occupational Differences

Average hourly earnings by occupation, as presented in table 6, ranged from \$1.087 for skilled male blockers in the back shops to 37.8 cents for the group of females in miscellaneous unskilled direct occupations.

Among the skilled males, the finishers, who compose the largest occupational group in the fur-felt hat industry, averaged 78.4 cents an hour. The lowest average for this skill-sex group was received by the inspectors in the back shops, who earned 74.3 cents. It will be noted that the hourly earnings of a number of the skilled occupations exceeded the average for foremen, who received only 88.6 cents.

The few skilled females included only forewomen and leather inserters, who averaged respectively 55.6 cents and 64.5 cents. The lower average for forewomen is due largely to the fact that these workers combined supervisory duties with various types of semiskilled operations. Hence, their hourly earnings are comparable with those of the higher-paid semiskilled women.

The average hourly earnings of semiskilled males ranged from 69.5 cents for multiroller operators, who constitute the largest occupation in this group, to 47.8 cents for ironers. It will be observed that the front-shop pouncers and slickers, who were classed as semiskilled, averaged considerably less than the skilled back-shop pouncers (65.5 cents as compared with 95.7 cents an hour). Likewise, the hourly earnings of the skilled back-shop blockers were almost double the average for the semiskilled front-shop blockers.

TABLE 6.—Average hourly earnings, weekly hours, and weekly earnings of fur-felt hat workers, by skill, sex, and occupation, 1939

Skill, sex, and occupation	Number of workers	Average hourly earnings	Average weekly hours	Average weekly earnings
<i>Skilled workers</i>				
Males:				
"A" and "B" machine operators.....	269	\$0.761	35.7	\$27.17
Blockers, back shop.....	244	1.087	33.0	35.92
Coners.....	173	.982	33.2	32.62
Finishers.....	955	.784	37.3	29.21
Flangers.....	250	.781	37.8	29.54
Foremen, working.....	123	.886	42.3	37.48
Hardeners.....	158	.969	33.3	32.25
Inspectors, back shop.....	49	.743	38.1	28.27
Inspectors, front shop.....	72	.854	40.0	34.19
Pouncers, back shop.....	171	.957	35.0	33.54
Starters.....	586	.893	32.9	29.35
Miscellaneous, direct.....	84	.798	40.1	32.03
Miscellaneous, indirect.....	113	.825	43.2	35.62
Females:				
Forewomen.....	31	.556	40.2	22.36
Leather inserters.....	142	.645	36.8	23.72
<i>Semiskilled workers</i>				
Males:				
Blockers, front shop.....	145	.546	38.8	21.17
Brin curlers.....	30	.573	39.3	22.52
Clerks, factory.....	65	.587	42.6	24.98
Fur blowers and mixers.....	73	.546	40.2	21.98
Ironers.....	146	.478	39.9	19.10
Multiroller operators.....	326	.695	32.4	22.50
Packers.....	99	.489	41.6	20.34
Pouncers and slickers, front shop.....	254	.655	37.9	24.80
Rounders.....	55	.566	40.3	22.82
Stiffeners.....	41	.576	40.3	23.24
Miscellaneous, direct.....	154	.536	41.3	22.11
Miscellaneous, indirect.....	79	.578	44.7	25.86
Females:				
Binders.....	127	.541	36.8	19.89
Leather fitters.....	70	.509	36.6	18.59
Leather joiners and bow tackers.....	65	.533	35.3	18.83
Lining inserters.....	136	.491	34.3	16.85
Lining makers.....	36	.587	32.1	18.86
Trimmers.....	645	.474	36.4	17.26
Welters.....	56	.466	40.1	18.69
Miscellaneous, direct.....	113	.457	42.0	19.19
<i>Unskilled workers</i>				
Males:				
Dye-room attendants.....	75	.412	41.3	17.00
Dye-room helpers.....	65	.509	40.5	20.64
Floor workers.....	204	.396	41.2	16.30
Forming-machine feeders.....	83	.395	35.4	14.01
Stizers' helpers.....	101	.432	36.8	15.88
Watchmen.....	51	.421	49.5	20.82
Miscellaneous, direct.....	174	.429	39.6	16.99
Miscellaneous, indirect.....	61	.444	41.2	18.31
Females:				
Floor workers.....	52	.389	39.7	15.46
Forming-machine feeders.....	59	.394	35.0	13.78
Miscellaneous, direct.....	72	.378	38.2	14.42

The trimmers, who averaged 47.4 cents an hour, were the most important of the semiskilled females, and make up, in fact, the second largest occupational group in the industry. The highest hourly earnings in this skill-sex group were received by the small group of lining makers, who averaged 58.7 cents.

Among the unskilled workers, only the male dye-room helpers averaged as much as 50 cents an hour, while the hourly earnings of the remaining occupations ranged from 44.4 cents for the male miscellaneous indirect workers to 37.8 cents for the female miscellaneous direct workers. It is worthy of note that the averages for male and female forming-machine feeders are almost identical. Likewise, the hourly earnings of male and female floor workers differed by less than 1 cent an hour. This is particularly interesting, in view of the fact that both of these groups are paid almost entirely on a straight-time basis.

Effect of Overtime on Hourly Earnings

As previously pointed out, the earnings data presented in this report are based on regular rates of pay for all time worked disregarding extra rates paid for overtime. Of the 52 plants scheduled in the survey, 32 paid some extra overtime wages during the pay period covered. The amount of such payment was small in each case and was fairly well distributed over the working force. Consequently, the addition of overtime earnings resulted in but a slight change in the data shown. The actual increase in average hourly earnings for the industry as a whole amounts to only three-tenths of 1 cent, which means that the industry average including extra overtime earnings is 66.6 cents, as against the 66.3-cent average based on regular rates of pay.

Weekly Hours

Full-Time Hours

A majority of the plants covered by the survey of the fur-felt hat industry had a normal workweek of 40 hours. The proportion varied considerably among the different types of plants.

Of the 9 independent back shops, 4 were on a 40-hour basis, 1 had a workweek of 44 hours, and in 1 establishment the full-time hours varied from 32½ to 44 (depending upon the occupation of the worker or the shift on which he was employed). In the 3 remaining back shops, some of the occupations normally worked 40 hours, while others had a 44-hour week.

The 30 independent front shops included 12 plants with a 40-hour week, 9 on a 44-hour basis, 7 having some workers at 44 and others at 40 hours, 1 with a 43¾-hour week, and 1 with a workweek of 45

hours. The latter establishment provided two 6-minute rest periods each day.⁸

Of the 13 integrated establishments, 10 had a 40-hour week and 1 was on a 44-hour basis. Of the 2 remaining plants, one had a 40-hour week for all but a few workers who were on a 30-hour week, while the other was on a 40- to 42-hour basis, depending upon the occupation of the worker.

Operation of more than one shift was found in seven of the integrated plants and six of the independent back shops. None of the independent front shops had second- or third-shift operations. In the integrated establishments, the multiple-shift operations were confined almost entirely to the back shops.

Actual Weekly Hours

The actual workweek of all workers in the fur-felt hat industry averaged 37.2 hours. An examination of the data for the different skill-sex groups in the various types of plants, as shown in table 7, reveals that the average hours of work varied from 33.8 for semiskilled males in back shops of integrated establishments to as much as 44.3 for unskilled males in independent front shops. For the industry as a whole, however, the averages varied from 36.1 hours for skilled males to 40.2 hours for unskilled males.

TABLE 7.—Average actual weekly hours of fur-felt hat workers, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All plants.....	37.2	37.3	36.9	36.1	36.1	37.4	37.7	38.5	36.7	39.7	40.2	37.6
Back shops.....	35.5	35.5	34.9	34.6	34.6	---	35.4	35.5	(1)	38.7	39.1	35.3
Front shops.....	38.4	39.2	37.0	38.0	38.0	37.4	38.2	39.9	36.8	41.1	42.1	38.8
Integrated plants.....	36.6	36.7	36.1	35.8	35.8	36.0	36.5	36.9	35.9	39.5	40.1	37.0
Back shops.....	35.2	35.2	35.6	34.5	34.5	---	33.9	33.8	(1)	39.2	39.7	36.1
Front shops.....	37.9	38.8	36.1	37.8	38.1	36.0	37.4	38.9	35.9	39.9	40.8	37.9
Independent back shops.....	36.0	36.1	34.2	34.6	34.6	---	38.6	39.2	(1)	38.0	38.3	35.6
Independent front shops.....	38.9	39.6	37.7	38.1	38.0	38.6	38.9	41.0	37.4	43.1	44.3	40.2

¹ Number of workers not sufficient to justify computation of an average.

Nearly seven-tenths (69.0 percent) of the employees worked from 32 to 44 hours, inclusive, during the selected pay-roll period. One-fifth (19.8 percent) worked exactly 40 hours, while 14.2 percent worked exactly 44 hours. A substantial proportion (22.1 percent) worked under 32 hours. This group is made up largely of workers who received only part-time employment, due to labor turn-over and

⁸In accordance with the practice observed by both the Bureau of Labor Statistics and the Wage and Hour Division, these rest periods have been considered part of the regular working time.

absenteeism during the pay-roll period scheduled. On the other hand, 8.9 percent averaged over 44 hours. This group includes the employees who were entitled to overtime compensation, under the provisions of the Fair Labor Standards Act.

Weekly Earnings ⁹

The weekly earnings of all workers in the fur-felt hat industry averaged \$24.69 (table 8). The average was \$26.57 for males and \$18.13 for females. The weekly earnings ranged from \$34.33 for skilled males in the front shops of integrated plants to as low as \$11.24 for unskilled females in independent front shops.

Nearly four-fifths (78.1 percent) of the employees in the fur-felt hat industry earned between \$10 and \$35 per week. About one-sixth (17.1 percent) received \$35 or more, but only 4.0 percent earned as much as \$45 or more. Only 4.8 percent of the workers received under \$10 a week.

TABLE 8.—Average weekly earnings of fur-felt hat workers, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All plants.....	\$24.69	\$26.57	\$18.13	\$30.48	\$30.86	\$23.48	\$20.45	\$22.54	\$17.92	\$16.55	\$17.01	\$14.51
Back shops.....	26.92	27.27	14.10	31.33	31.33	.....	22.57	22.79	(1)	16.95	17.31	13.98
Front shops.....	23.17	25.86	18.34	29.52	30.25	23.48	19.98	22.41	17.96	15.98	16.46	14.79
Integrated plants.....	26.88	28.51	19.72	32.50	32.83	25.06	23.15	25.28	19.62	17.97	18.35	16.32
Back shops.....	27.66	27.90	15.37	32.02	32.02	.....	22.34	22.34	(1)	17.96	18.30	15.02
Front shops.....	26.17	29.32	19.95	33.30	34.33	25.06	23.42	27.20	19.62	18.00	18.44	16.92
Independent back shops.....	25.70	26.20	12.98	30.18	30.18	.....	23.03	23.77	(1)	15.68	16.05	12.77
Independent front shops.....	20.54	22.63	17.08	26.61	27.13	22.19	17.04	17.44	16.76	12.63	13.19	11.24

¹ Number of workers not sufficient to justify computation of an average.

⁹ It should be remembered that all weekly earnings data presented in this report are based on regular rates of pay, excluding extra earnings for overtime.

Manufacture of Wool-Felt Hats

Analysis of Sample

The 1937 Census of Manufactures reported 14 establishments, with an average monthly employment of 4,038 wage earners during the year, engaged in the manufacture of carded wool-felt hat bodies. This includes only plants having an annual product valued at \$5,000 or more.¹⁰

The Bureau's survey in 1939 covered 15 wool-felt hat establishments, employing 3,335 wage earners during the selected pay-roll period.¹¹ This total includes 5 large integrated plants; 5 independent rough-body plants, or back shops; and 5 small independent establishments engaged in finishing men's wool-felt hats from purchased bodies, or front shops. It should be pointed out, however, that 3 of these 5 independent front shops are in reality departments in plants primarily engaged in making other products, such as straw hats or finished fur-felt hats.

The chief product of the wool-felt hat industry consists of rough bodies for women's hats. According to the census data for 1937, out of a total production of 2,799,689 dozen wool-felt hat bodies and hats, 2,152,256 dozen were sold in the rough to be made into women's or children's hats. The production of finished hats in this branch, as reported by the Census of Manufactures, amounted to only 372,019 dozen, of which 294,878 dozen were for men and boys and 77,141 dozen for women and children.

Of the plants covered, 5 with 370 wage earners were in New York; 4 with 1,627 workers were in Pennsylvania; and 6 with 1,338 wage earners were in Connecticut, Georgia, Massachusetts, and Missouri.

Trade-union organization in the wool-felt hat industry is confined to the independent back and front shops.

Composition of Labor Force

The separation of back- and front-shop operations in the wool-felt hat industry is similar to that found in the fur-felt hat plants. Although the wool-felt back-shop processes differ in many respects from those used in making fur-felt hat bodies, the conditions of work are such that, as in the fur-felt hat industry, the opportunities for employment of women are limited. Male employees constitute four-fifths (79.6 percent) of the labor force in all wool-felt back shops (table 9). In the front shops, on the other hand, less than three-fifths (56.9 percent) of the workers are men. The proportion of female workers was

¹⁰ None of the establishments reported 20 or less wage earners.

¹¹ The Bureau was unable to obtain information covering 1 medium-sized plant.

considerably higher in the independent than in the integrated back shops (32.5 percent as against 12.3 percent). The opposite is true of the front shops, however, 43.5 percent of the workers in the integrated, as against 41.6 percent in the independent plants, being females. These variations may be due partly to differences in the degree of finish applied to the bodies produced for sale, which in turn may be related to the type or price range of the finished hat.

TABLE 9.—Distribution of workers covered in survey of wool-felt hat industry, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skilled males	Semiskilled workers			Unskilled workers		
	Total	Male	Female		Total	Male	Female	Total	Male	Female
All plants.....	3,335	2,467	868	628	2,408	1,580	828	299	259	40
Back shops.....	2,510	1,998	512	440	1,848	1,346	502	222	212	10
Front shops.....	825	469	356	188	560	234	326	77	47	30
Integrated plants.....	2,190	1,707	483	409	1,571	1,121	450	210	177	33
Back shops.....	1,502	1,318	184	241	1,117	937	180	144	140	4
Front shops.....	688	389	299	168	454	184	270	66	37	29
Independent back shops.....	1,008	680	328	199	731	409	322	78	72	6
Independent front shops.....	137	80	57	20	106	50	56	11	10	1
Percentage distribution										
All plants.....	100.0	74.0	26.0	18.8	72.2	47.4	24.8	9.0	7.8	1.2
Back shops.....	100.0	79.6	20.4	17.6	73.6	53.6	20.0	8.8	8.4	.4
Front shops.....	100.0	56.9	43.1	22.8	67.9	28.4	39.5	9.3	5.7	3.6
Integrated plants.....	100.0	78.0	22.0	18.7	71.7	51.2	20.5	9.6	8.1	1.5
Back shops.....	100.0	87.7	12.3	16.0	74.4	62.4	12.0	9.6	9.3	.3
Front shops.....	100.0	56.5	43.5	24.4	66.0	26.7	39.3	9.6	5.4	4.2
Independent back shops.....	100.0	67.5	32.5	19.8	72.5	40.6	31.9	7.7	7.1	.6
Independent front shops.....	100.0	58.4	41.6	14.6	77.4	36.5	40.9	8.0	7.3	.7

The wool-felt hat industry offers a sharp contrast to the fur-felt hat plants with respect to the distribution of employees by skill. Whereas a high proportion of the workers in the latter industry, particularly in the back shops, are highly skilled, such employees form only 17.6 percent of the labor force in the wool-felt back shops and 22.8 percent in the wool-felt front shops. All of the skilled workers were males. On the other hand, only 8.8 percent of the back-shop and 9.3 percent of the front-shop workers were classed as unskilled employees.

Average Hourly Earnings

Although straight piece rates are quite prevalent in the wool-felt hat industry, employees affected by this method of wage payment constituted only two-fifths (39.9 percent) of the total labor force. Nearly two-thirds (63.8 percent) of the front-shop workers, as compared with less than one-third (32.0 percent) of those in back shops, were paid by straight piece rates. Some piece workers were found in

every establishment covered by the survey. Very few occupations in the industry were paid piece rates exclusively, although this method was employed for most of the workers in several of the leading direct occupations, such as pouncers and slickers, hardeners, finishers, trimmers, and blockers. Only 1.4 percent of the total workers were paid under production bonus plans.

The distribution of individual hourly earnings, as presented in table 10, covered an effective range from 30 cents to \$1, within which were found 97.5 percent of all workers. A pronounced concentration (29.5 percent) occurred between 35 and 40 cents. Only 5.1 percent of the hourly earnings were under 35 cents. The group 40 to 42.5 cents contained 12.7 percent of the workers, while 12.5 percent averaged from 42.5 to 47.5 cents, and the distribution tapers off gradually from 47.5 cents to \$1. There were 9.9 percent of the workers averaging 77.5 cents and over.

TABLE 10.—Percentage distribution of wool-felt hat workers by average hourly earnings, sex, and skill, 1939

Average hourly earnings	All workers			Male workers		
	Total	Male	Female ¹	Skilled	Semi-skilled	Unskilled
Under 25.0 cents.....	0.1	0.1	0.2			1.2
Exactly 25.0 cents.....	.7	.7	.7		0.8	1.5
25.1 and under 27.5 cents.....	.2	.1	.6		.1	
27.5 and under 30.0 cents.....	.6	.2	1.7	0.2	.3	.4
30.0 and under 32.5 cents.....	1.9	1.5	3.2	.8	.9	6.9
32.5 and under 35.0 cents.....	1.6	1.3	2.4	1.0	1.1	3.1
35.0 and under 37.5 cents.....	15.8	16.1	15.6	4.9	20.1	18.1
37.5 and under 40.0 cents.....	13.7	10.5	22.7	1.9	13.2	15.4
40.0 and under 42.5 cents.....	12.7	11.8	15.2	3.0	13.5	22.1
42.5 and under 47.5 cents.....	12.5	10.5	18.2	4.9	13.2	7.3
47.5 and under 52.5 cents.....	6.8	6.9	6.3	5.4	6.1	15.8
52.5 and under 57.5 cents.....	5.4	5.7	4.5	7.2	5.4	3.9
57.5 and under 62.5 cents.....	5.5	6.6	2.4	8.9	6.6	1.5
62.5 and under 67.5 cents.....	4.7	5.3	2.9	11.3	3.7	.4
67.5 and under 72.5 cents.....	4.6	5.9	1.0	12.3	4.3	.4
72.5 and under 77.5 cents.....	3.3	4.2	.7	7.5	3.5	.4
77.5 and under 82.5 cents.....	3.7	4.7	.9	12.6	2.2	.4
82.5 and under 87.5 cents.....	2.5	3.2	.3	7.5	2.1	
87.5 and under 92.5 cents.....	1.2	1.5	.3	3.2	.9	.8
92.5 and under 100.0 cents.....	1.6	2.0	.2	3.7	1.6	.4
100.0 cents and over.....	.9	1.2		3.7	.4	
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

¹ Includes 828 semiskilled and 40 unskilled females.

Variations by Sex and Skill

The average hourly earnings for all male employees was 52.2 cents, as compared with 43.0 cents for the females (table 11). The skilled workers, all of whom were males, averaged 66.3 cents. It is worthy of note that the hourly earnings of the remaining sex and skill groups varied within a spread of less than 10 cents, ranging from 48.6 cents for the semiskilled males to 40.3 cents for the unskilled females. Among the semiskilled workers, who made up nearly three-fourths of the labor force, the average for the females was 5.4 cents lower than

that for the males. The average for unskilled females differed by only 1.4 cents from that for unskilled males.

Few of the workers of either sex averaged under 35 cents an hour, the proportions being 3.9 percent of the males and 8.8 percent of the females. In terms of 5-cent intervals, the principal concentration of both sexes was between 35 and 40 cents, 26.6 percent of the males and 38.3 percent of the females being included in that range. However, the hourly earnings of the males were more widely dispersed than were the hourly earnings of the females. Thus, nearly one-half (48.9 percent) of the males, as compared with 71.7 percent of the females, averaged between 35 and 47.5 cents. About one-sixth (16.8 percent) of the males, as against 2.4 percent of the females, earned 72.5 cents or more.

Only 8.8 percent of the skilled males averaged under 40 cents an hour, while 30.7 percent were paid 77.5 cents or more. The respective percentages were 36.5 and 7.2 for the semiskilled males and 46.6 and 1.6 for the unskilled males.

TABLE 11.—Average hourly earnings of wool-felt hat workers, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skilled males	Semiskilled workers			Unskilled workers		
	Total	Male	Female		Total	Male	Female	Total	Male	Female
All plants.....	\$0. 498	\$0. 522	\$0. 430	\$0. 663	\$0. 468	\$0. 486	\$0. 432	\$0. 415	\$0. 417	\$0. 403
Back shops.....	. 482	. 500	. 407	. 660	. 452	. 467	. 408	. 402	. 405	(1)
Front shops.....	. 545	. 608	. 461	. 671	. 517	. 590	. 464	. 451	. 408	. 424
Integrated plants.....	. 496	. 515	. 432	. 672	. 463	. 475	. 433	. 424	. 426	. 416
Back shops.....	. 475	. 485	. 405	. 676	. 444	. 451	. 406	. 409	. 410	(1)
Front shops.....	. 540	. 610	. 448	. 667	. 508	. 590	. 450	. 456	. 430	. 425
Independent back shops.....	. 493	. 530	. 408	. 642	. 464	. 502	. 410	. 391	. 396	(1)
Independent front shops.....	. 571	. 599	. 531	(1)	. 560	. 591	. 533	(1)	(1)	(1)

¹ Number of workers not sufficient to justify computation of an average.

Variations by Type of Plant

In the wool-felt as in the fur-felt hat industry, hourly earnings differ considerably among the various types of establishments. Wage levels are generally higher in the wool-felt front shops than in the back shops, which is in contrast with the situation found in the fur-felt hat plants.

As was shown in table 11, the earnings of all workers in the wool-felt back shops averaged 48.2 cents an hour. In the front shops, the average was 54.5 cents, a difference of 6.3 cents. As against an average of 47.5 cents for all employees of integrated back shops, the workers in independent back shops averaged 49.3 cents an hour. Likewise, in the front-shop operations, wage earners in the independent establishments received higher pay than those employed by integrated plants, the averages being 57.1 cents and 54.0 cents,

respectively. Hourly earnings in the front shops exceeded the averages in the back shops for every sex and skill group for which a comparison is possible, with the exception of the skilled males in integrated plants, where the difference in favor of the back-shop employees amounted to less than 1 cent.

Table 12 shows the distribution of individual earnings for all workers by type of establishment.

TABLE 12.—Percentage distribution of wool-felt hat workers, by average hourly earnings and type of plant, 1939

Average hourly earnings	All plants			Integrated plants			Independent plants	
	Total	Back shops	Front shops	Total	Back shops	Front shops	Back shops	Front shops
Under 25.0 cents.....	0.1	0.1	0.2	0.2	0.2	0.3	-----	-----
Exactly 25.0 cents.....	.7	.4	1.5	.6	.6	.6	0.2	5.8
25.1 and under 27.5 cents.....	.2	(1)	.7	.3	.1	.7	-----	.7
27.5 and under 30.0 cents.....	.6	.7	.4	.3	.3	.3	1.3	-----
30.0 and under 32.5 cents.....	1.9	1.7	2.7	2.0	1.7	2.5	1.7	3.6
32.5 and under 35.0 cents.....	1.6	1.2	2.7	1.8	1.6	2.3	.7	4.4
35.0 and under 37.5 cents.....	15.8	16.8	13.1	20.0	22.4	14.8	8.4	5.1
37.5 and under 40.0 cents.....	13.7	16.0	6.8	11.2	12.8	7.6	20.4	2.9
40.0 and under 42.5 cents.....	12.7	13.9	8.7	12.4	14.1	8.7	13.7	8.9
42.5 and under 47.5 cents.....	12.5	13.1	10.4	11.6	11.9	11.0	14.9	8.0
47.5 and under 52.5 cents.....	6.8	6.3	8.4	6.4	5.9	7.4	6.7	13.2
52.5 and under 57.5 cents.....	5.4	4.7	7.4	4.8	4.0	6.7	5.8	11.0
57.5 and under 62.5 cents.....	5.5	5.2	6.7	5.9	5.5	6.8	4.7	5.8
62.5 and under 67.5 cents.....	4.7	4.4	5.5	4.5	3.8	6.1	5.4	2.2
67.5 and under 72.5 cents.....	4.6	4.4	5.5	4.8	4.2	6.1	4.7	2.2
72.5 and under 77.5 cents.....	3.3	3.2	3.6	3.6	3.6	3.5	2.6	4.4
77.5 and under 82.5 cents.....	3.7	3.5	4.5	4.0	3.9	4.2	2.9	5.8
82.5 and under 87.5 cents.....	2.5	2.4	2.7	2.2	2.1	2.3	2.9	4.4
87.5 and under 92.5 cents.....	1.2	.6	2.8	1.0	.3	2.5	1.1	4.4
92.5 and under 100.0 cents.....	1.6	.8	3.9	1.6	.5	4.1	1.3	2.9
100.0 cents and over.....	.9	.6	1.8	.8	.5	1.5	.6	3.6
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Less than 1/10 of 1 percent.

Earnings in Relation to Fair Labor Standards Act

Very few employees in the wool-felt hat industry were earning under 25 cents an hour, the minimum rate now in effect under the provisions of the Fair Labor Standards Act. The adjustment to the 30-cent minimum, effective on October 24, 1939, will require but slight changes in the wage structure, as the number of workers now earning less than that figure amounts to only 1.6 percent of the total labor force (1.1 percent of the males and 3.2 percent of the females).

Workers averaging under 40 cents an hour constituted 34.6 percent of the total labor force. The proportions were 30.5 percent for males and 47.1 percent for females. Among the skilled males, only 8.8 percent averaged under 40 cents. The percentages were 36.5 for semi-skilled and 46.6 for unskilled males.

An examination of the plant averages shows that of the 15 establishments covered by the survey 5 were under 45 cents an hour, 4 between 45 and 50 cents, 3 between 50 and 55 cents, and 3 over 55 cents.¹²

Because of the limited number of establishments in the wool-felt hat industry, it is impossible to present distributions of individual earnings for plant groups classified on the basis of plant averages. An examination of the basic data indicates, however, that none of the establishments surveyed, including those with the lowest averages, had a substantial number of workers receiving under 35 cents an hour. On the other hand, a considerable proportion of the employees in all except the plants averaging 50 cents an hour or more were receiving under 40 cents.

Occupational Differences

Occupational averages in the wool-felt hat industry, as shown in table 13, ranged from 76.0 cents an hour for male pouncers and slickers, a skilled back-shop operation, to 36.8 cents for semiskilled male coners.

The side hardeners, who make up the largest occupational group of skilled males, averaged 65.3 cents. The lowest hourly earnings for skilled males were received by the miscellaneous indirect employees, who averaged 60.8 cents. This group includes the various building maintenance workers, such as plumbers, carpenters, machinists, etc.

Among the semiskilled males, the front-shop blockers received 68.8 cents an hour, which was the highest average for this group. It will be observed that the hourly earnings of this occupation exceeded the averages for all of the skilled occupations with the exception of the back-shop pouncers and slickers. Among the largest semiskilled male occupations were the multiroller operators, who averaged 49.5 cents and the back-shop blockers, whose average was 48.6 cents an hour.

The hourly earnings of the semiskilled females ranged from 55.3 cents for leather workers to 38.8 cents for back-shop inspectors. The coners, who were most numerous among this group, averaged 39.8 cents. It will be observed that this exceeds the average for male coners by exactly 3 cents.

There were too few employees to permit the computation of averages for any unskilled occupations except the male dusters and washers, who received 41.2 cents an hour. The male employees in miscellaneous unskilled direct occupations averaged 41.8 cents, as against 42.2 cents for those in the indirect jobs. The unskilled females averaged 40.3 cents.

¹² Examination of the original data reveals that on the whole average hourly earnings, for both back shops and front shops, were higher among the plants located in New York and Massachusetts than in those situated in other States. It is impossible to present specific data on this point without revealing figures for individual establishments.

TABLE 13.—Average hourly earnings, weekly hours, and weekly earnings of wool-felt hat workers, by skill, sex, and occupation, 1939

Skill, sex, and occupation	Number of workers	Average hourly earnings	Average weekly hours	Average weekly earnings
<i>Skilled workers</i>				
Males:				
Foremen, working.....	71	\$0.667	44.7	\$29.79
Pouncers and finishers, front shop.....	162	.648	38.2	24.76
Pouncers and slickers, back shop.....	108	.760	31.2	23.70
Side hardeners.....	229	.653	35.7	23.30
Miscellaneous, indirect.....	58	.608	47.0	28.54
<i>Semiskilled workers</i>				
Males:				
Blockers, back shop.....	201	.486	40.2	19.54
Blockers, front shop.....	68	.688	38.7	26.58
Brim and crown pressers.....	39	.550	41.4	22.81
Card strippers.....	32	.451	43.2	19.50
Catchers and folders.....	101	.461	38.8	17.91
Coners.....	118	.368	35.0	12.90
Inspectors, back shop.....	133	.403	36.6	14.75
Inspectors, front shop.....	42	.529	41.9	22.18
Kettlemen.....	42	.420	43.7	18.36
Multiroller or mezzera operators.....	224	.495	40.9	20.28
Pushers and bumpers.....	45	.433	41.9	18.13
Sizers.....	169	.502	39.8	19.97
Stiffeners.....	103	.458	38.6	17.70
Tip hardeners.....	70	.577	37.6	21.67
Wool mixers and feeders.....	34	.449	43.0	19.29
Miscellaneous, direct.....	130	.526	43.4	22.82
Miscellaneous, indirect.....	29	.615	44.7	23.00
Females:				
Coners.....	209	.398	35.1	13.96
Inspectors, back shop.....	134	.388	36.9	14.31
Leather workers.....	73	.553	38.5	21.30
Speckers and trimmers, hat bodies.....	95	.424	38.5	16.33
Trimmers.....	175	.429	40.6	17.42
Welters and binders.....	39	.445	42.2	18.79
Miscellaneous, direct.....	103	.468	38.5	18.00
<i>Unskilled workers</i>				
Males:				
Dusters and washers.....	69	.412	41.4	17.05
Miscellaneous, direct.....	152	.418	39.8	16.64
Miscellaneous, indirect.....	38	.422	43.6	18.39
Females: Miscellaneous.....				
	40	.403	39.3	15.85

Effect of Overtime on Hourly Earnings

Some extra compensation for overtime work was found in 10 of the 15 wool-felt hat plants covered by the survey. Although a number of employees were affected, the amount of extra pay in each case was quite small. A computation of the extra overtime earnings shows that the actual increase in the average hourly earnings would amount to only one-fifth of a cent. In other words, the total average would be 50.0 cents an hour, as against 49.8 cents covering the earnings at regular rates only.

Weekly Hours

Full-Time Hours

Of the 15 wool-felt hat manufacturing establishments, 4 independent front shops and 2 integrated plants had a normal workweek of 40 hours. The full-time workweek was 44 hours in 3 back shops, 1 front shop, and 2 integrated plants. In 1 back shop and 1 integrated plant a

majority of the employees worked 44 hours, but some were on a 40-hour basis. The remaining establishment, an independent back shop, had a workweek of 37.5 hours for all employees.

More than one shift operation for some occupations was practiced in three integrated plants, two independent back shops, and one independent front shop. In only one plant, an independent back shop, were all occupations on a double shift. None of the establishments reported wage differentials between shifts.

Actual Weekly Hours

The actual hours worked in the wool-felt hat industry as a whole averaged 39.0 per week. According to table 14 the averages for the various types of plants did not differ materially, amounting to 38.0 hours in the independent back shops, as against 38.7 hours in the independent front shops and 39.6 in the integrated establishments. The averages by sex and skill show that the actual workweek was longer for males than for females. Moreover, it increased in length as the skill of the worker decreased.

TABLE 14.—Average actual weekly hours of wool-felt hat workers, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skill- ed males	Semiskilled workers			Unskilled workers		
	Total	Male	Fe- male		Total	Male	Fe- male	Total	Male	Fe- male
All plants.....	39.0	39.4	38.0	37.6	39.2	39.9	38.0	40.6	40.8	39.3
Back shops.....	38.6	39.1	36.4	37.0	38.8	39.6	36.4	40.0	40.4	(1)
Front shops.....	40.5	40.5	40.5	39.0	40.8	41.4	40.4	42.1	42.5	41.5
Integrated plants.....	39.6	39.5	39.8	37.3	40.0	40.0	39.9	40.9	41.2	39.2
Back shops.....	39.0	39.1	38.2	36.2	39.4	39.6	38.5	40.0	40.5	(1)
Front shops.....	40.9	40.9	40.9	38.9	41.3	42.1	40.8	42.8	43.7	41.7
Independent back shops.....	38.0	39.2	35.4	38.0	37.7	39.7	35.3	40.1	40.1	(1)
Independent front shops.....	38.7	38.9	38.4	(1)	38.5	38.6	38.5	(1)	(1)	(1)

¹ Number of workers not sufficient to justify computation of an average.

In the scheduled pay period 74.2 percent of the employees worked from 36 to 44 hours. One-third (33.5 percent) worked exactly 44 hours; 15.0 percent worked exactly 40 hours; and three-fifths (60.3 percent) worked from 40 to 44 hours.

One-fifth (20.6 percent) of the workers worked under 36 hours, whereas only 5.2 percent worked over 44 hours. Among the male employees, 20.2 percent worked under 36 hours, while 7.0 percent worked over 44 hours. A substantial proportion of the females had a relatively short workweek, 21.3 percent working under 36 hours. Moreover, for all practical purposes none of the females worked in excess of 44 hours.

Weekly Earnings ¹³

The weekly earnings of all workers in the wool-felt hat industry averaged \$19.46 (table 15). The earnings of males averaged \$20.55 per week, which may be compared with \$16.37 for females. The weekly earnings of males exceeded the average for females in every skill-group and plant type. This, of course, is due to the fact that the males not only received higher hourly earnings, but had a longer actual workweek than the females in every case.

TABLE 15.—Average weekly earnings of wool-felt hat workers, by type of plant, skill, and sex, 1939

Type of plant	All workers			Skill- ed males	Semiskilled workers			Unskilled workers		
	Total	Male	Fe- male		Total	Male	Fe- male	Total	Male	Fe- male
All plants.....	\$19.46	\$20.55	\$16.37	\$24.96	\$18.35	\$19.37	\$16.40	\$16.85	\$17.01	\$15.85
Back shops.....	18.61	19.58	14.80	24.45	17.51	18.50	14.88	16.11	16.37	(1)
Front shops.....	22.06	24.66	18.64	26.17	21.10	24.40	18.73	18.98	19.87	17.59
Integrated plants.....	19.63	20.32	17.21	25.07	18.52	19.02	17.28	17.35	17.54	16.32
Back shops.....	18.52	18.95	15.45	24.47	17.52	17.88	15.65	16.34	16.63	(1)
Front shops.....	22.05	24.94	18.30	25.92	20.99	24.84	18.36	19.54	20.98	17.70
Independent back shops.....	18.73	20.80	14.43	24.42	17.51	19.91	14.45	15.69	15.87	(1)
Independent front shops.....	22.09	23.28	20.41	(1)	21.58	22.78	20.52	(1)	(1)	(1)

¹ Number of workers not sufficient to justify computation of an average.

Over four-fifths (81.8 percent) of the workers received between \$10 and \$30 per week, and 7.1 percent received under \$10. About one-tenth (11.1 percent) averaged \$30 or more, but only 3.7 percent received \$35 or more.

A significant proportion of both sexes received under \$10 per week. Very few of the females received as much as \$30 or more, as compared with 14.2 percent of the males. The analysis of weekly earnings of males according to skill shows, however, that the earnings of \$30 or more were confined largely to the most skilled group.

¹³ It should be remembered that all weekly earnings data presented in this report are based on regular rates of pay, excluding extra earnings for overtime.

Manufacture of Straw Hats

Analysis of Sample

The 1937 Census of Manufactures covering the men's straw-hat industry includes 47 establishments having an annual product valued at \$5,000 or more. The monthly employment in these plants averaged 3,024 wage earners during the year. The industry's total output in 1937, as reported by the census, included 2,130,100 dozen hats, of which 919,599 dozen were for dress wear and 1,210,501 dozen harvest hats. Of the dress straw hats, 555,747 dozen were made of sewed braid and 363,852 dozen of woven-body construction. These totals include a relatively insignificant amount of women's straw hats.

Most of the straw-hat production is carried on in establishments devoted primarily to that purpose, the principal exceptions being found in the few large integrated fur-felt hat companies that have straw-hat departments. Only those establishments were covered in the Bureau's survey which had more than 20 wage earners. These included 14 plants, employing 1,264 wage earners, engaged solely in making dress straw hats; 4 establishments, with 258 wage earners, producing only harvest hats; and 3 plants, with 428 workers, making both dress straw and harvest hats. The survey also included 3 plants, with a total of 600 wage earners, producing dress straw hats but having departments in which fur- or wool-felt hats are made. In addition, the survey covered 422 workers employed in dress-straw-hat departments of 6 establishments whose principal products were wool- or fur-felt hats.¹⁴

Three of the establishments with 268 employees were located in Connecticut, 3 with 450 wage earners in Missouri, and 12 with 549 workers in New York; the other 12 plants with 1,705 wage earners were in the States of California, Georgia, Massachusetts, New Jersey, Texas, Maryland, Pennsylvania, and Illinois. Measured by number of wage earners employed, New York, Missouri, and Maryland are the leading States in straw-hat manufacture. Most of the dress straw hats are produced in New York and Maryland, and most of the harvest hats in Missouri and Illinois.

The greater number of the straw-hat establishments are in large metropolitan areas, only 5 dress-straw-hat plants with 212 wage earners and 3 harvest-hat establishments with 244 workers being found in communities of under 500,000 population.

Trade-union organization is relatively extensive in the straw-hat industry. The plants with trade-union agreements included 12 dress-straw-hat establishments but only 2 plants producing harvest hats.

¹⁴ These 30 establishments employed 2,972 wage earners at the time of the survey.

Composition of Labor Force

Most of the operations in straw-hat manufacture are semiskilled in character. For the industry as a whole, about two-thirds (65.6 percent) of the workers were semiskilled, 26.6 percent skilled, and 7.8 percent unskilled (table 16). The proportions differed widely as between dress straw and harvest hats. In the latter, 84.3 percent of the workers were classed as semiskilled, while only 5.8 percent were skilled. In the dress-straw-hat establishments, on the other hand, 30.7 percent of the workers were skilled and 62.0 percent semiskilled.

TABLE 16.—*Distribution of workers covered in survey of straw-hat industry, by product, skill, and sex, 1939*

Product	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Fe-male	Total	Male	Fe-male	Total	Male	Fe-male	Total	Male	Fe-male
All products.....	2,972	1,431	1,541	792	683	109	1,949	593	1,356	231	155	73
Dress straw hats.....	2,489	1,145	1,344	764	655	109	1,542	367	1,175	183	123	60
Harvest hats.....	483	286	197	28	28	-----	407	226	181	48	32	16
Percentage distribution												
All products.....	100.0	48.1	51.9	26.6	22.9	3.7	65.6	20.0	45.6	7.8	5.2	2.6
Dress straw hats.....	100.0	46.0	54.0	30.7	26.3	4.4	62.0	14.8	47.2	7.3	4.9	2.4
Harvest hats.....	100.0	59.2	40.8	5.8	5.8	-----	84.3	46.8	37.5	9.9	6.6	3.3

For the total industry, the labor force is composed of nearly equal proportions of males and females (48.1 percent males as against 51.9 percent females). In the harvest-hat branch, however, the number of males exceeds the number of females, the respective proportions being 59.2 percent and 40.8 percent. For dress straw hats, the figures were 46.0 percent for males and 54.0 percent for females. Most of the females in both branches were in semiskilled occupations.

Average Hourly Earnings

All of the straw-hat establishments, with the exception of one small plant making harvest hats, paid a substantial proportion of their employees on a straight piece-rate basis. Over seven-tenths (72.8 percent) of the wage earners in the industry as a whole were piece workers, but the proportion of piece workers was considerably lower in the harvest-hat than in the dress-straw-hat plants, the percentages being 59.4 and 75.4, respectively. None of the establishments covered had production-bonus systems.

Piece rates were in effect for a substantial proportion of the workers in most of the principal direct occupations, such as sewing-machine

operators, trimmers, blockers, sprayers and painters, and leather inserters. The chief occupations paid largely on a time-rate basis include the working foremen, indirect workers, packers, and work distributors.

According to the distribution in table 17, the individual earnings were widely dispersed. A few workers averaged under 25 cents, and the number receiving \$1 and over amounted to 3.6 percent of the total. An outstanding feature of the distribution is the pronounced concentration of hourly earnings at exactly 25 cents, with over one-tenth of the workers being paid exactly the minimum rate provided by the Fair Labor Standards Act. Aside from the grouping at 25 cents, the principal concentration is found between 30 and 35 cents, if an interval of 5 cents is used, the earnings of one-eighth (12.4 percent) of the workers falling within these limits. Nearly one-third (32.1 percent) of the wage earners averaged under 35 cents, and over one-fifth (20.6 percent) received 67.5 cents or more.

Male employees averaged 57.3 cents an hour, as compared with 41.1 cents for females. It will be observed that a considerable number of both groups received exactly 25 cents an hour, the proportion being 11.7 percent of the males and 10.1 percent of the females.

TABLE 17.—Percentage distribution of straw-hat workers, by average hourly earnings, product, and sex, 1939

Average hourly earnings	All products			Dress straw hats			Harvest hats		
	All workers	Males	Fe-males	Total	Males	Fe-males	Total	Males	Fe-males
Under 25.0 cents.....	0.3	0.3	0.3	0.1	0.2	0.1	1.0	0.7	1.5
Exactly 25.0 cents.....	10.9	11.7	10.1	10.1	11.4	8.6	15.8	13.0	19.8
25.1 and under 27.5 cents.....	4.5	3.7	5.3	4.3	3.7	4.8	5.8	3.8	8.6
27.5 and under 30.0 cents.....	4.0	2.2	5.7	4.4	2.3	6.3	1.9	1.7	2.0
30.0 and under 32.5 cents.....	7.1	5.0	9.0	6.8	4.0	9.2	8.3	9.2	7.1
32.5 and under 35.0 cents.....	5.3	2.6	7.8	5.5	2.7	8.0	3.9	2.1	6.6
35.0 and under 37.5 cents.....	6.1	3.2	8.7	6.4	3.1	9.2	4.3	3.5	5.6
37.5 and under 40.0 cents.....	4.8	2.2	7.1	4.9	1.9	7.4	4.1	3.5	5.1
40.0 and under 42.5 cents.....	5.6	4.6	6.5	5.1	3.5	6.5	7.9	9.2	6.1
42.5 and under 47.5 cents.....	8.7	5.5	11.7	8.4	5.1	11.0	10.8	7.0	16.2
47.5 and under 52.5 cents.....	6.7	5.5	7.9	6.5	4.6	8.0	8.1	8.8	7.1
52.5 and under 57.5 cents.....	6.0	4.9	6.9	5.9	4.6	7.1	6.0	5.9	6.1
57.5 and under 62.5 cents.....	5.1	5.6	4.6	4.9	5.2	4.7	6.0	7.3	4.1
62.5 and under 67.5 cents.....	4.3	5.8	3.0	4.3	6.0	2.8	4.6	4.9	4.1
67.5 and under 72.5 cents.....	4.8	7.4	2.3	5.0	7.8	2.7	3.7	6.3	-----
72.5 and under 77.5 cents.....	3.0	5.4	.8	2.9	5.2	1.0	3.7	6.3	-----
77.5 and under 82.5 cents.....	3.4	5.8	1.1	3.7	6.6	1.3	1.9	3.1	-----
82.5 and under 87.5 cents.....	2.1	3.6	.7	2.3	4.0	.8	1.0	1.7	-----
87.5 and under 92.5 cents.....	1.9	3.7	.3	2.2	4.4	.3	.6	1.0	-----
92.5 and under 100.0 cents.....	1.8	3.6	.1	2.1	4.5	.1	-----	-----	-----
100.0 and under 110.0 cents.....	1.8	3.8	-----	2.1	4.6	-----	.2	.3	-----
110.0 and under 120.0 cents.....	.9	1.9	.1	1.0	2.2	.1	.4	.7	-----
120.0 cents and over.....	.9	2.0	-----	1.1	2.4	-----	-----	-----	-----
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Variations by Sex and Skill

On the basis of skill-sex groups, the average hourly earnings in the industry as a whole ranged from 74.7 cents for skilled males to 30.5 cents for unskilled males (table 18). The average for skilled females

was 49.7 cents, or 25 cents less than the average hourly earnings of skilled males. Among the semiskilled workers, the males averaged 45.5 cents, as against 40.9 cents for females. The unskilled males averaged 30.5 cents, while the unskilled females averaged 31.4 cents.

TABLE 18.—Average hourly earnings of straw-hat workers, by product, skill, and sex, 1939

Product	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male
All products.....	\$0.491	\$0.573	\$0.411	\$0.713	\$0.747	\$0.497	\$0.424	\$0.455	\$0.409	\$0.308	\$0.305	\$0.314
Dress straw hats.....	.500	.595	.416	.717	.753	.497	.419	.437	.414	.301	.298	.308
Harvest hats.....	.441	.482	.337	.615	.618	.....	.441	.485	.380	.336	.333	(¹)

¹ Number of workers not sufficient to justify computation of an average.

Variations by Product

An examination of the plant averages shows that, of the 26 dress-straw-hat plants covered by the survey, 8 had averages under 45 cents an hour, 4 between 45 and 55 cents, 6 between 55 and 60 cents, 5 between 60 and 75 cents, and 3 over 75 cents. Of the 7 plants producing harvest hats, 3 averaged under 45 cents and 4 between 45 and 55 cents an hour.¹⁵

The average hourly earnings of all workers in dress-straw-hat establishments was exactly 50 cents. This may be compared with 44.1 cents for employees of harvest-hat plants. As the distributions given in table 17 indicate, both branches of the industry employ substantial numbers of workers averaging under 30 cents an hour (18.9 percent in dress straw as against 24.5 percent in harvest hats). There were 10.8 percent of the dress-straw-hat workers, as compared with only 2.2 percent of the harvest-hat employees, who averaged 82.5 cents or more.

Although average hourly earnings of all employees is higher in dress-straw-hat than in harvest-hat plants, for some skill-sex groups the opposite is true. For example, the semiskilled males averaged 48.5 cents an hour in harvest-hat plants, as compared with 43.7 cents in establishments making dress straw hats. Likewise, the unskilled males employed in the harvest-hat branch averaged 33.3 cents, as against 29.8 cents for the unskilled male employees of dress-straw-hat plants. On the other hand, there was a very substantial difference in favor of the skilled males in the dress-straw-hat branch, who averaged 75.3 cents as compared with 61.5 cents for the skilled males employed in harvest-hat plants. Similarly, the semiskilled females averaged

¹⁵ The coverage in the straw-hat industry included 3 plants that made both dress straw and harvest hats. Separate averages have been computed for the 2 departments in each of these establishments.

41.4 cents in dress-straw-hat plants and 38.0 cents in harvest-hat establishments.

Table 19 shows the distributions of individual average hourly earnings for the various skill-sex groups in the dress-straw-hat branch.

TABLE 19.—Percentage distribution of straw-hat workers, by average hourly earnings, skill, and sex, 1939

Average hourly earnings	All workers			Skilled workers			Semiskilled workers			Unskilled workers ¹	
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male
Under 25.0 cents.....	0.1	0.2	0.1	2.0	1.4	5.5	0.1	0.3	0.1	0.5	0.8
Exactly 25.0 cents.....	10.1	11.4	8.6	2.0	1.4	5.5	9.7	20.4	6.3	45.9	39.0
25.1 and under 27.5 cents.....	4.3	3.7	4.8	.7	.2	3.7	5.3	6.0	5.0	11.5	15.4
27.5 and under 30.0 cents.....	4.4	2.3	6.3	.5	---	3.7	6.0	4.1	6.6	7.1	8.9
30.0 and under 32.5 cents.....	6.8	4.0	9.2	1.8	1.2	5.5	9.2	6.5	10.1	7.7	11.4
32.5 and under 35.0 cents.....	5.5	2.7	8.0	1.8	.6	9.2	7.5	6.0	8.0	4.4	4.1
35.0 and under 37.5 cents.....	6.4	3.1	9.2	2.4	2.1	8.7	8.5	4.1	9.9	5.5	5.7
37.5 and under 40.0 cents.....	4.9	1.9	7.4	.8	.6	1.8	7.1	4.4	8.0	3.3	1.6
40.0 and under 42.5 cents.....	5.1	3.5	6.5	2.7	2.1	6.4	6.5	6.0	6.6	3.8	3.3
42.5 and under 47.5 cents.....	8.4	5.1	11.0	4.2	3.5	8.3	10.7	7.6	11.7	5.5	5.7
47.5 and under 52.5 cents.....	6.5	4.6	8.0	4.2	3.2	10.1	7.9	7.6	8.0	3.3	3.3
52.5 and under 57.5 cents.....	5.9	4.6	7.1	6.8	5.6	13.7	6.2	4.1	6.8	.5	.8
57.5 and under 62.5 cents.....	4.9	5.2	4.7	6.4	6.7	4.6	4.7	4.1	4.9	---	---
62.5 and under 67.5 cents.....	4.3	6.0	2.8	7.5	7.9	4.6	3.2	4.6	2.8	---	---
67.5 and under 72.5 cents.....	5.0	7.8	2.7	10.4	11.5	4.6	2.9	3.8	2.6	---	---
72.5 and under 77.5 cents.....	2.9	5.2	1.0	6.0	6.7	1.8	1.7	4.1	.9	---	---
77.5 and under 82.5 cents.....	3.7	6.6	1.3	10.1	10.7	7.3	.8	1.4	.7	.5	---
82.5 and under 87.5 cents.....	2.3	4.0	.8	6.3	6.6	4.6	.6	.8	.5	---	---
87.5 and under 92.5 cents.....	2.2	4.4	.3	6.2	7.2	---	.5	.8	.3	---	---
92.5 and under 100.0 cents.....	2.1	4.5	.1	6.2	7.2	---	.4	1.1	.2	---	---
100.0 and under 110.0 cents.....	2.1	4.6	---	6.3	7.3	---	.3	1.4	---	---	---
110.0 and under 120.0 cents.....	1.0	2.2	.1	3.3	3.7	.9	.1	.3	---	---	---
120.0 cents and over.....	1.1	2.4	---	3.4	4.0	---	.1	.5	---	---	---
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Number of female workers not sufficient to justify computation of a distribution.

Earnings in Relation to Fair Labor Standards Act

The pronounced concentration of earnings in the straw-hat industry at exactly 25 cents an hour is evidence that the application of the 25-cent minimum resulted in a certain amount of readjustment in the wage structure of the industry.

About one-fifth (19.7 percent) of the employees covered by the survey were averaging under 30 cents, which group will be affected by the new minimum taking effect on October 24, 1939. The proportions amounted to 18.9 percent in the dress-straw-hat plants and 24.5 percent in the harvest-hat establishments.

If 40 cents is taken as the limit, the number earning below that figure amounted to over two-fifths (43.0 percent) of the total workers. It will be observed that about the same proportion of employees in each branch received earnings under the 40-cent level, the percentages being 42.5 for dress straw and 45.1 for harvest hats. A substantial number of the workers of both sexes in each branch were included in this group, the proportions ranging from 29.3 percent of the males in dress-straw-hat plants to 56.3 percent of the females in the harvest-hat establishments.

Occupational Differences

Occupational averages for both the dress-straw and harvest-hat branches are shown in table 20.

In the dress-straw branch, average hourly earnings ranged from 86.0 cents for skilled male hand flangers to 29.0 cents for the male miscellaneous direct unskilled workers. The hydraulic blockers, who were most numerous among the skilled males, averaged 71.9 cents. The forewomen and leather inserters were the only female occupations classed as skilled. They averaged 55.0 and 48.2 cents an hour, respectively.

TABLE 20.—Average hourly earnings, weekly hours, and weekly earnings of straw-hat workers, by product, skill, sex, and occupation, 1939

Skill, sex, and occupation	Number of workers	Average hourly earnings	Average weekly hours	Average weekly earnings
Dress straw hats				
<i>Skilled workers</i>				
Males:				
Blockers, hand.....	197	\$0.820	38.3	\$31.43
Blockers, hydraulic.....	220	.719	41.5	29.83
Flangers, hand.....	38	.860	42.2	33.30
Foremen, working.....	40	.827	44.8	37.02
Miscellaneous, direct.....	137	.665	40.7	27.04
Miscellaneous, indirect.....	23	.751	43.4	32.63
Females:				
Forewomen, working.....	23	.550	43.7	24.01
Leather inserters.....	86	.482	40.0	19.29
<i>Semiskilled workers</i>				
Males:				
Clerks, factory.....	26	.481	44.6	21.48
Packers.....	83	.354	44.9	15.91
Sprayers and painters.....	53	.604	43.0	25.98
Miscellaneous, direct.....	186	.421	44.0	18.52
Miscellaneous, indirect.....	19	.436	42.9	18.72
Females:				
Leather fitters.....	127	.424	38.9	16.50
Operators.....	450	.439	40.1	17.64
Trimmers.....	332	.399	40.6	16.19
Miscellaneous, direct.....	216	.382	41.8	15.94
<i>Unskilled workers</i>				
Males:				
Miscellaneous, direct.....	105	.290	44.8	13.00
Miscellaneous, indirect.....	18	.342	47.5	16.25
Females: Miscellaneous, direct.....	60	.308	41.9	12.90
Harvest hats				
<i>Skilled workers</i>				
Males: Miscellaneous.....	28	\$0.615	43.7	\$26.84
<i>Semiskilled workers</i>				
Males:				
Blockers and pressers.....	55	.548	42.5	23.32
Packers.....	48	.372	41.1	15.27
Sprayers and painters.....	44	.597	39.1	23.37
Miscellaneous.....	79	.452	42.9	19.38
Females:				
Band sewers.....	45	.416	38.7	16.09
Binder operators.....	35	.439	35.9	15.74
Inspectors.....	35	.354	39.8	14.09
Miscellaneous.....	66	.341	38.2	13.03
<i>Unskilled workers</i>				
Males: Miscellaneous.....	32	.333	41.9	13.96
Females: Miscellaneous.....	16	.342	35.9	12.30

Among the semiskilled workers in the dress-straw branch, the male sprayers and painters had the highest average, 60.4 cents an hour. On the other hand, the male packers averaged only 35.4 cents, which was the lowest for the semiskilled occupations. The female sewing-machine operators make up the largest occupational group in the straw-hat industry. Their earnings averaged 43.9 cents an hour, which was the highest average for the semiskilled females.

There were too few unskilled employees in any separate occupation to permit the computation of an average.

Relatively few of the occupational groups in the harvest-hat branch contained enough workers to justify the presentation of averages. All of the occupations for which averages may be shown were classed as semiskilled. It will be observed that the male sprayers and painters had the highest earnings, 59.7 cents an hour. This was 24.3 cents more than the average for female inspectors, who were the lowest-paid occupational group for which an average was computed.

It is interesting to compare the few occupations which are fairly comparable as between the dress-straw and the harvest branches. Thus, the sprayers and painters averaged 60.4 cents in the dress-straw-hat plants, as against 59.7 cents in harvest-hat establishments. On the other hand, the packers in harvest-hat plants earned 1.8 cents per hour more than the packers in dress-straw-hat establishments.

Effect of Overtime on Hourly Earnings

Of the 26 dress-straw-hat plants included in the survey, 13 paid extra rates for overtime work during the selected pay-roll period. The extra payments amounted in all to an average of 0.4 cent an hour. With the inclusion of the extra payments, average hourly earnings for the dress-straw-hat industry becomes 50.4 cents, as compared with 50.0 cents with the extra overtime pay deducted. In view of the fact that the extra payments were widely distributed, it is doubtful if the average for any occupational group would be increased by as much as 1 cent by the addition of extra overtime earnings to the wages based on regular rates of pay.

Extra overtime earnings in the harvest-hat branch totaled 0.3 cent an hour. In other words, the average for the entire branch with extra overtime pay included would have been 44.4 cents, instead of the 44.1 cents average for earnings at regular rates of pay.

Weekly Hours

Full-Time Hours

Of the 30 establishments in which dress straw or harvest hats were made, 15 had a normal workweek of 40 hours, 12 plants were on a 44-hour basis, and in 3 establishments part of the employees had a

40-hour week while some were on a 44-hour basis. The plants having a 40-hour week for all workers included 11 dress-straw-hat establishments, 3 plants in which only harvest hats were made, and 1 producing both dress straw and harvest hats. Among the plants on a 44-hour basis, there were 9 dress-straw-hat establishments, 1 plant making only harvest hats, and 2 plants in which both dress straw and harvest hats were produced. The 3 plants operating on a combined 40- and 44-hour basis were making only dress-straw hats.

None of the establishments covered in this section of the survey had multiple-shift operations.

Actual Weekly Hours

The actual time worked for all employees covered in the survey of the straw-hat industry averaged 41.2 hours per week. The average for the dress-straw-hat branch was 41.3 hours, as against 40.3 hours in the harvest-hat establishments (table 21). The averages ranged from 45.2 hours for the small number of unskilled males in dress-straw-hat plants to 38.2 hours for semiskilled females in the harvest-hat branch.

TABLE 21.—Average weekly hours and weekly earnings of straw-hat workers, by product, skill, and sex, 1939

Product	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Average weekly hours											
All products.....	41.2	42.2	40.2	40.8	40.8	40.8	41.1	43.1	40.2	43.3	44.6	40.6
Dress straw hats.....	41.3	42.2	40.5	40.7	40.7	40.8	41.3	44.0	40.5	44.1	45.2	41.9
Harvest hats.....	40.3	41.9	38.0	43.7	43.7	-----	40.1	41.7	38.2	39.9	41.9	(¹)
	Average weekly earnings											
All products.....	\$20.20	\$24.15	\$16.53	\$29.08	\$30.49	\$20.29	\$17.40	\$19.61	\$16.44	\$13.31	\$13.58	\$12.77
Dress straw hats.....	20.66	25.14	16.85	29.16	30.64	20.29	17.32	19.22	16.73	13.29	13.47	12.90
Harvest hats.....	17.80	20.19	14.34	26.84	26.84	-----	17.70	20.24	14.52	13.41	13.06	(¹)

¹ Number of workers not sufficient to justify computation of an average.

The distribution of wage earners according to weekly hours worked shows that the bulk of them (75.6 percent) averaged between 32 and 44 hours, inclusive. Particularly noticeable is the heavy concentration (34.7 percent) of workers averaging exactly 44 hours. This, of course, results from the desire of the employer to operate the maximum number of hours without paying extra overtime rates, as required by the Fair Labor Standards Act. Nevertheless, about one-seventh (15.2 percent) of the workers averaged over

44 hours, and presumably they were paid time and a half for the hours worked beyond the normal allowed under the act. About one-sixth (16.2 percent) of the workers in the industry as a whole were employed exactly 40 hours.

Weekly Earnings ¹⁶

As shown in table 21, the weekly earnings of all employees in the straw-hat industry averaged \$20.20 during the selected pay-roll period. The level of earnings was somewhat higher in the dress-straw than in the harvest-hat establishments, the respective weekly averages being \$20.66 and \$17.80. Comparison of the averages by skill and sex show that this difference was due primarily to the higher earnings of skilled workers in dress-straw-hat plants. Moreover, it will be observed, the average for these employees was lower in the harvest-hat plants despite the fact that their actual workweek was 3 hours longer than that of the skilled workers in the dress straw-hat plants. The differences as between dress-straw and harvest hats were relatively minor for the other sex and skill groups.

The distribution for all employees in the industry shows that four-fifths (79.7 percent) averaged between \$10 and \$30 a week. There were 14.9 percent paid \$30 or more, and 5.4 percent received under \$10.

¹⁶ It should be remembered that all weekly earnings data presented in this report are based on regular rates of pay, excluding extra earnings for overtime.

Manufacture of Hat Materials

Analysis of Sample

The hat-materials industry includes establishments producing hatters' fur, hat linings, sweat bands, and ribbons for hats. The most important of these products is hatters' fur, which is the basic raw material used in the manufacture of fur-felt hats. According to the Census of Manufactures, the value of hatters' fur produced in 1937 amounted to \$9,681,184, which was over 60 percent of the combined value of all hat and cap materials.

On the basis of number of employees, as shown in this survey, it is estimated that about 75 percent of the fur cutting for the hat industry is done in independent establishments. Most of this output is produced for sale, but there is also a small amount of fur cutting on a contract basis. The remaining 25 percent is made up of the fur cut by a few large hat plants for their own use.

Aside from hatters' fur, the principal products included under the designation of hat materials are leathers or sweat bands, linings, and bands. These are usually made in small independent plants that specialize in such products. One of the large integrated hat companies makes all types of trimmings for its own use, while several plants make their own linings. In addition, the industry contains a number of small contract shops that do leather reeding, tip (lining) printing, or leather stamping on a commission basis.

The Bureau's survey of the hat-materials industry covered 3,126 wage earners, employed in 52 establishments.¹⁷ This includes 21 independent fur-cutting plants, 4 fur-cutting departments operated in hat factories, 10 establishments making sweat bands, 6 plants producing hat linings, and 11 establishments which made ribbons for hat bands. In addition, one large company is represented by both a fur-cutting and a trimmings department. The number of wage earners covered total 1,785 in hatters' fur and 1,341 in trimmings plants. As hat-trimmings plants are small, the coverage in this branch was extended to include plants having 5 or more wage earners.

All of the establishments covered in this part of the survey were in or near the principal hat centers, such as Philadelphia, New York City, northern New Jersey, and the Danbury, Conn., area. Connecticut was the leading State in fur-cutting, with 15 plants employing 965 wage earners. About one-third of these workers were employed in the fur-cutting departments of establishments producing hat bodies.

¹⁷ As noted before, the report of the Census of Manufactures covering this industry includes both hat and cap materials, no break-down separating the two kinds of products. Hence, no comparison can be made between the coverage of the survey and the data shown by the census.

New Jersey ranked second in importance with 6 plants (all independent establishments), employing 471 wage earners. The remaining hatters' fur plants covered by the survey included 2 in New York, 1 in Massachusetts, and 1 in Pennsylvania.

Of the 28 trimmings plants, 11, with 452 workers, were in New York; 5, with 429 wage earners, in Pennsylvania; 9, employing 344 workers, in New Jersey; and 3, with 116 workers, in Connecticut. A majority of the hat-band producers were in Paterson, N. J., which is the center of the silk industry.

Trade-union organization is not common in the hatters' fur branch of the industry. Collective agreements were found in only four establishments. In each instance, the employees were represented by the United Hatters, Cap, and Millinery Workers' Union.

On the other hand, a large majority of the trimmings plants had agreements with labor organizations. Several international unions were represented, including not only the United Hatters, Cap, and Millinery Workers, but the United Textile Workers and the United Leather Workers. Members of the latter organizations were found, respectively, in the silk hat-band plants and in the leather establishments.

Composition of Labor Force

Because of the miscellaneous nature of the products included under the general designation of hat materials, a description of the labor force in the industry as a whole conveys an inadequate picture of the situation in any single plant. In fact, only the hatters' fur branch is sufficiently homogeneous in this respect to justify such an analysis.

In the hatters' fur branch, over three-fifths (61.8 percent) of the workers were males (table 22). The majority of the occupations were classed as semiskilled, 70.0 percent of the workers being in this category. The proportions of semiskilled employees differed considerably between the 2 sexes, however. Of the 1,104 males, 60.5 percent were semiskilled, 30.4 percent unskilled, and only 9.1 percent were in skilled jobs. Among the females, on the other hand, none were classed as skilled, while 85.5 percent were semiskilled, and 14.5 percent unskilled.

The greatest variation among plants with respect to composition of the labor force is found in the trimmings branch. This is not surprising, in view of the fact that these establishments include some that are engaged exclusively in tanning and dyeing leathers, others that specialize in printing and gold stamping, and still others that weave or braid silk for hat bands.

TABLE 22.—*Distribution of workers covered in survey of hat-materials industry, by product, skill, and sex, 1939*

Product	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All products.....	3,126	1,792	1,334	605	535	70	1,861	832	1,029	660	425	235
Hatters' fur.....	1,785	1,104	681	100	100	-----	1,250	668	582	435	336	99
Trimmings.....	1,341	688	653	505	435	70	611	164	447	225	89	136
Percentage distribution												
All products.....	100.0	57.3	42.7	19.4	17.1	2.3	59.5	26.6	32.9	21.1	13.6	7.5
Hatters' fur.....	100.0	61.8	38.2	5.6	5.6	-----	70.0	37.4	32.6	24.4	18.8	5.6
Trimmings.....	100.0	51.3	48.7	37.7	32.5	5.2	45.5	12.2	33.3	16.8	6.6	10.2

In the trimmings branch, the labor force consists of about equal numbers of the two sexes, the proportions being 51.3 percent males and 48.7 percent females. A majority of the males were skilled, whereas most of the females were in semiskilled and unskilled occupations.

Average Hourly Earnings

Although piece-rate systems of wage payment were in effect in all but four of the hat-materials plants, the number of employees on piece work amounted to only 32.7 percent of the total labor force in the hatters' fur and 39.2 percent in the trimmings plants. Among the occupations in fur-cutting establishments in which substantial numbers of piece workers were found were carroters, clippers, and openers. In the trimmings plants, a majority of the piece workers were found among the cutters, lining makers, warpers, and weavers.

The number of employees working under production-bonus systems amounted to less than 1 percent of the total labor force in the hat-materials industry as a whole.

The distribution of individual earnings, as shown in table 23, covered an effective range from 25 cents to about \$1.20 an hour, within which were found all but 1.2 percent of the total workers. In terms of a uniform 5-cent class interval, the principal concentration (22.5 percent) was between 37.5 and 42.5 cents. The majority of the hourly earnings (55.1 percent) fell within the range from 35 to 57.5 cents. However, as many as one-third (34.9 percent) of the workers averaged 57.5 cents and over. On the other hand, exactly one-tenth received under 35 cents, while the number averaging under 25 cents was negligible.

TABLE 23.—Percentage distribution of hat-materials workers, by average hourly earnings, skill, and sex, 1939

Average hourly earnings	All workers			Skilled workers ¹		Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Total	Male	Female	Total	Male	Female
Under 25.0 cents.....	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2
Exactly 25.0 cents.....	1.2	.7	2.0	.....	.....	.8	0.4	1.1	3.8	2.1	6.8
25.1 and under 27.5 cents.....	1.2	.7	1.9	.....	.....	1.2	.....	2.2	2.0	2.8	.4
27.5 and under 30.0 cents.....	1.8	.9	2.8	.....	.....	1.2	.2	2.0	4.7	3.3	7.2
30.0 and under 32.5 cents.....	3.7	2.2	5.8	.....	.....	3.3	1.2	5.1	7.7	6.8	9.4
32.5 and under 35.0 cents.....	2.0	1.0	3.3	1.2	.6	2.0	.5	3.2	2.7	2.6	3.0
35.0 and under 37.5 cents.....	6.3	2.0	12.0	.3	.2	7.0	1.2	11.7	9.7	5.9	16.6
37.5 and under 40.0 cents.....	12.5	2.8	25.8	.5	.4	16.2	1.2	28.4	13.3	9.2	20.9
40.0 and under 42.5 cents.....	10.0	4.1	18.2	1.3	.4	11.5	3.8	17.8	13.9	9.4	22.0
42.5 and under 47.5 cents.....	8.4	7.3	10.0	3.6	2.2	8.0	5.6	9.8	14.2	17.0	9.4
47.5 and under 52.5 cents.....	8.9	10.3	7.0	5.0	2.8	9.2	12.0	6.9	11.5	16.3	3.0
52.5 and under 57.5 cents.....	9.0	12.5	4.3	7.3	5.8	10.9	19.1	4.3	5.5	8.5	.....
57.5 and under 62.5 cents.....	4.9	6.0	3.4	6.1	6.0	5.4	7.3	3.9	2.1	3.3	.....
62.5 and under 67.5 cents.....	4.1	6.5	.7	6.0	6.5	3.1	6.0	.8	5.0	7.5	.4
67.5 and under 72.5 cents.....	4.1	6.3	1.1	7.9	8.6	3.8	7.1	1.1	1.5	1.9	.9
72.5 and under 77.5 cents.....	4.4	6.9	.9	9.3	9.8	3.9	7.7	.9	1.1	1.6	.....
77.5 and under 82.5 cents.....	3.0	5.0	.2	6.9	7.7	2.4	5.2	.2	.9	1.4	.....
82.5 and under 87.5 cents.....	3.2	5.5	.1	7.9	8.8	2.7	6.0	.....	.2	.2	.....
87.5 and under 92.5 cents.....	3.4	5.7	.2	7.9	8.8	3.1	6.6	.2	.....	.....	.....
92.5 and under 100.0 cents.....	2.8	4.9	.....	9.9	11.1	1.5	3.2	.....	.....	.....	.....
100.0 and under 110.0 cents.....	2.7	4.6	.1	8.1	9.2	1.8	4.0	.1	.2	.2	.....
110.0 and under 120.0 cents.....	1.2	2.1	.....	4.3	4.9	.6	1.3	.....	.....	.....	.....
120.0 cents and over.....	1.1	1.9	.....	5.1	5.8	.2	.4	.....	.....	.....	.....
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Number of female workers not sufficient to justify computation of a distribution.

Male wage earners averaged 65.1 cents an hour as against 40.6 cents for females, a difference of 24.5 cents. This difference declined with skill, amounting to 30.7 cents for the skilled, 24.2 cents for semi-skilled, and only 8.7 cents for the unskilled employees.

TABLE 24.—Average hourly earnings of hat-materials workers, by product, skill, and sex, 1939

Product	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All products.....	\$0.552	\$0.651	\$0.406	\$0.780	\$0.821	\$0.514	\$0.520	\$0.649	\$0.407	\$0.427	\$0.455	\$0.368
Hatters' fur.....	.627	.612	.377	.739	.739	.514	.639	.671	.380	.446	.468	.361
Trimmings.....	.588	.715	.437	.802	.842	.514	.480	.558	.446	.385	.402	.373

Variations by Product

Examination of the plant averages shows that, of the 25 hatters' fur establishments, 5 averaged under 42.5 cents an hour, 6 between 45 and 50, 8 between 50 and 55, 3 between 55 and 60, and 3 over 60 cents. Of the 28 plants producing hat trimmings, on the other hand, 5 had averages between 42.5 and 50 cents, 9 between 50 and 55, 2 between 55 and 60, 6 between 60 and 65, and 6 over 65 cents.

The hourly earnings of all workers in the hat-trimmings branch averaged 58.8 cents, or 6.1 cents higher than the average shown for employees in the hatters' fur establishments. This was not true, however, of all skill-sex groups. The average hourly earnings of semiskilled and unskilled males were higher in the hatters' fur than in the hat-trimmings branch, respectively, by 11.3 cents and 6.6 cents. On the other hand, the hourly earnings of skilled males in hat-trimmings establishments exceeded the average for skilled males in hatters' fur plants by 10.3 cents. Likewise, semiskilled females averaged 6.6 cents more in the hat-trimmings than in the hatters' fur branch, while unskilled females averaged 1.2 cents more in the former than in the latter.

Table 25 shows the frequency distributions of individual earnings in the two branches of the industry.

TABLE 25.—Percentage distribution of hat-materials workers, by average hourly earnings, product, and sex, 1939

Average hourly earnings	All products			Hatters' fur			Trimmings		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Under 25.0 cents.....	0.1	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.2
Exactly 25.0 cents.....	1.2	.7	2.0	1.5	0.5	2.9	1.0	.9	1.1
25.1 and under 27.5 cents.....	1.2	.7	1.9	1.8	1.0	3.2	.4	.1	.6
27.5 and under 30.0 cents.....	1.8	.9	2.8	2.1	.6	4.4	1.3	1.5	1.2
30.0 and under 32.5 cents.....	3.7	2.2	5.8	3.9	2.0	6.9	3.6	2.5	4.7
32.5 and under 35.0 cents.....	2.0	1.0	3.3	2.2	1.2	3.8	1.7	.7	2.8
35.0 and under 37.5 cents.....	6.3	2.0	12.0	5.9	2.4	11.7	6.7	1.5	12.3
37.5 and under 40.0 cents.....	12.5	2.8	25.8	16.4	3.5	37.1	7.7	1.7	13.8
40.0 and under 42.5 cents.....	10.0	4.1	18.2	8.6	5.5	13.6	12.2	1.9	22.9
42.5 and under 47.5 cents.....	8.4	7.3	10.0	8.4	8.7	7.9	8.5	5.1	12.1
47.5 and under 52.5 cents.....	8.9	10.3	7.0	9.7	12.2	5.4	7.8	7.1	8.6
52.5 and under 57.5 cents.....	9.0	12.5	4.3	8.2	12.0	2.1	10.1	13.4	6.6
57.5 and under 62.5 cents.....	4.9	6.0	3.4	3.2	5.2	.1	7.0	7.3	6.7
62.5 and under 67.5 cents.....	4.1	6.5	.7	4.7	7.6	-----	3.2	4.8	1.5
67.5 and under 72.5 cents.....	4.1	6.3	1.1	4.1	6.5	.3	4.0	6.0	2.0
72.5 and under 77.5 cents.....	4.4	6.9	.9	4.6	7.3	.3	4.0	6.2	1.5
77.5 and under 82.5 cents.....	3.0	5.0	.2	3.1	5.1	-----	2.8	4.9	.5
82.5 and under 87.5 cents.....	3.2	5.5	.1	3.2	5.2	-----	3.1	6.0	.2
87.5 and under 92.5 cents.....	3.4	5.7	.2	3.3	5.3	-----	3.4	6.2	.5
92.5 and under 100.0 cents.....	2.8	4.9	-----	1.9	3.1	-----	4.0	7.7	-----
100.0 and under 110.0 cents.....	2.7	4.6	.1	2.1	3.4	-----	3.5	6.7	.2
110.0 and under 120.0 cents.....	1.2	2.1	-----	.8	1.3	-----	1.7	3.3	-----
120.0 cents and over.....	1.1	1.9	-----	.2	.4	-----	2.2	4.4	-----
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Earnings in Relation to Fair Labor Standards Act

Not only was the number of employees in the hat-materials industry averaging under 25 cents an hour negligible at the time of the survey, but there were also relatively few (1.2 percent) paid exactly 25 cents. Although the proportion receiving exactly 25 cents amounted to as much as 6.8 percent in the case of unskilled females, the actual number of workers involved in this group is insignificant.

The number of workers averaging under 30 cents an hour, which becomes the minimum rate after October 24, 1939, amounted to 4.3

percent of the total labor force. Among the skill-sex groups, the only ones that will be affected materially are the semiskilled females and the unskilled males and females, the respective percentages in each group earning under 30 cents being 5.6, 8.2, and 14.4.

The number of workers averaging under 40 cents an hour amounted to over one-fourth, 28.8 percent, of the total labor force. Very few skilled males received less than this figure, the proportion being 1.6 percent. Among the semiskilled workers only 4.7 percent of the males, as against 54.0 percent of the females, averaged under 40 cents. The proportion of workers averaging under 40 cents amounted to 32.7 percent of the unskilled males and 64.3 percent of the unskilled females.

Occupational Differences

Occupational averages for both branches of the hat-materials industry are shown in table 26, but there were too few employees in any single skilled occupation in the hatters' fur branch to permit the computation of separate averages for them.

The carroters, who constituted the principal male occupational class of the hatters' fur branch, averaged 75.7 cents an hour. This was 3.7 cents lower than the figure for clippers, who averaged 79.4 cents, but substantially higher than the hourly earnings of the remaining semiskilled males. The female fur sorters, who are classed as semiskilled, composed the largest occupational group in the hat-materials industry. They were also the lowest-paid occupation for which separate data may be presented, averaging only 36.6 cents. Among the unskilled workers, the male drummers had the highest average, namely, 50.2 cents an hour. The lowest hourly earnings for the males were received by the brushers, who averaged 42.5 cents. It will be observed that for brushers and dryers and spreaders, in which both sexes were employed, the males earned more than the females, the difference being 3.7 cents for brushers and 7.7 cents for dryers and spreaders.

In the hat-trimmings branch of the industry, the average hourly earnings of skilled males ranged from 95.5 cents for cutters to 82.8 cents for weavers, if the miscellaneous class is excluded. It will be observed that male weavers averaged considerably more than females, whose hourly earnings amounted to only 49.6 cents. Among semiskilled females, the highest average hourly earnings, namely, 53.0 cents, were reported for warpers. This figure was even higher than the average of the female weavers, who are classed as skilled employees. The semiskilled female lining makers averaged 49.6 cents. The lowest average for semiskilled females was 39.5 cents for pickers. Occupational averages could not be shown for the semiskilled males and both male and female unskilled workers.

TABLE 26.—Average hourly earnings, weekly hours, and weekly earnings, of hat-materials workers, by product, skill, sex, and occupation, 1939

Skill, sex, and occupation	Number of workers	Average hourly earnings	Average weekly hours	Average weekly earnings
Hatters' fur				
<i>Skilled workers</i>				
Males:				
Miscellaneous, direct.....	50	\$0.784	42.3	\$33.14
Miscellaneous, indirect.....	50	.696	44.1	30.69
<i>Semiskilled workers</i>				
Males:				
Carroters.....	184	.757	35.7	27.02
Clippers.....	163	.794	36.7	29.14
Fur cutters.....	125	.579	39.2	22.67
Blowers and mixers.....	124	.565	42.2	23.83
Miscellaneous, direct.....	45	.581	40.4	23.49
Miscellaneous, indirect.....	27	.562	42.4	23.85
Females:				
Fur sorters.....	883	.366	36.1	13.21
Openers.....	136	.403	35.6	14.87
Miscellaneous.....	64	.411	39.8	16.36
<i>Unskilled workers</i>				
Males:				
Brushers.....	61	.425	39.3	16.74
Drummers.....	35	.502	45.6	22.89
Dryers and spreaders.....	78	.444	44.2	19.61
Watchmen.....	26	.441	49.0	21.69
Miscellaneous, direct.....	136	.498	41.0	20.43
Females:				
Brushers.....	30	.388	37.1	14.37
Dryers and spreaders.....	28	.367	40.1	14.70
Miscellaneous, direct.....	41	.339	37.4	12.68
Hat trimmings				
<i>Skilled workers</i>				
Males:				
Cutters.....	41	\$0.955	39.0	\$37.20
Foremen, working.....	37	.897	40.6	36.33
Printers.....	98	.857	41.9	35.93
Weavers.....	168	.828	35.4	29.28
Miscellaneous.....	91	.774	37.3	28.86
Females:				
Weavers.....	45	.496	31.1	15.42
Miscellaneous.....	25	.541	38.2	20.69
<i>Semiskilled workers</i>				
Males:				
Miscellaneous.....	164	.558	39.4	22.02
Females:				
Pickers.....	49	.395	30.3	11.97
Lining makers.....	149	.496	35.3	17.45
Warpers.....	46	.530	30.5	16.19
Winders and reelers.....	79	.411	32.0	13.14
Miscellaneous.....	124	.400	37.1	14.85
<i>Unskilled workers</i>				
Males:				
Miscellaneous.....	89	.402	39.1	15.72
Females:				
Miscellaneous.....	136	.373	36.0	13.40

Effect of Overtime on Hourly Earnings

Of the 25 hatters' fur plants, 13 paid extra rates for overtime worked during the selected pay-roll period. In most cases, the overtime was paid at the rate of time and a half after 44 hours per week, in accordance with the requirements of the Fair Labor Standards Act. A few establishments allowed time and a half after 8 hours in any day or after 40 hours per week. For the branch as a whole, the addition of all extra overtime pay would increase the average by only 0.4 cent.

Extra overtime payments were also made by a number of establishments in the trimmings branch of the industry. Several plants paid time and a third after 40 hours and time and a half after 44 hours per week. In this, as in the hatters' fur branch, the total amount of extra overtime payments increased the industry average by 0.4 cent.

Weekly Hours

Full-Time Hours

The majority of plants making hat materials were operating on a 40-hour basis during the pay-roll period covered by the survey. The total in this group included 17 fur-cutting establishments, 24 plants making hat trimmings, and 1 large integrated plant that produces both hatters' fur and hat trimmings. The normal workweek consisted of 44 hours in 6 establishments, including 4 engaged in processing hatters' fur and 2 in making hat trimmings. In 3 fur-cutting plants, some of the workers had a 40-hour week and others were on a 44-hour basis. One hat-trimmings establishment had a normal workweek of 42½ hours.

Only two hatters' fur plants and one hat-trimmings establishment employed workers on extra shifts. In all cases, however, the multiple-shift operation was confined to only a few operators. No wage differentials between shifts were reported.

Actual Weekly Hours

The actual weekly hours of all employees in the hat-materials industry averaged 37.8 (table 27). The workers in hatters' fur establishments averaged 38.8 hours, which may be compared with 36.5 hours for those in hat-trimmings plants. The averages for the various sex and skill groups ranged from 43.2 hours for skilled males in the hatters' fur branch to 33.6 hours for skilled females in hat-trimmings establishments. The actual average weekly hours were shorter in the hat-trimmings than in the hatters' fur branch for every skill-sex group except the semiskilled males, who averaged 1 hour more in the former than in the latter.

Over three-fourths (77.6 percent) of the workers averaged between 32 and 44 hours, inclusive, per week. The wide prevalence of the 40-hour week is demonstrated by the fact that over one-third (36.4 percent) of the hatters' fur workers and one-half (50.7 percent) of the hat-trimmings plant employees worked exactly 40 hours. On the other hand, 18.4 percent in the fur-cutting establishments, as against 6.0 percent in the trimmings branch, worked exactly 44 hours. The proportion of employees working under 32 hours amounted to 14.7 percent in hatters' fur, as compared with 16.7 percent in hat trimmings. The number of workers employed over 44 hours amounted to 8.0

percent of the labor force in the hatters' fur branch and 5.3 percent in the hat-trimmings plants. Virtually all of these employees in both branches were males.

Weekly Earnings¹⁸

The weekly earnings of all employees scheduled in the survey of the hat-materials industry averaged \$20.89 (table 27). The averages for the two branches were quite similar, amounting to \$20.45 in hatters' fur and \$21.47 in hat trimmings. Although the actual workweek in fur plants exceeded that in hat-trimmings establishments by 2.3 hours, the average weekly earnings in the latter were slightly higher than in the former, due to the higher level of hourly earnings.

An outstanding feature in both branches is the marked difference between the average weekly earnings of males and females. Thus, in the hatters' fur branch males averaged \$24.54, as against \$13.82 for females, a difference of \$10.72. In the hat-trimmings plants, the weekly earnings of males averaged \$27.54 or \$12.46 more than the average for females.

In the industry as a whole 72.9 percent of the workers received between \$10 and \$30 per week. About one-tenth (9.6 percent) received under \$10, while 17.5 percent were paid \$30 or more.

TABLE 27.—Average weekly hours and weekly earnings of hat-materials workers, by product, skill, and sex, 1939

Product	All workers			Skilled workers			Semiskilled workers			Unskilled workers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Average weekly hours												
All products.....	37.8	39.5	35.6	38.4	39.0	33.6	36.8	38.6	35.4	40.0	41.8	36.8
Hatters' fur.....	33.8	40.1	36.6	43.2	43.2	-----	37.5	38.4	36.4	41.5	42.5	38.1
Trimmings.....	36.5	38.5	34.5	37.4	38.0	33.6	35.6	39.4	34.2	37.2	39.1	36.0
Average weekly earnings												
All products.....	\$20.89	\$25.69	\$14.44	\$30.31	\$32.02	\$17.31	\$19.17	\$25.03	\$14.44	\$17.08	\$19.04	\$13.56
Hatters' fur.....	20.45	24.54	13.82	31.92	31.92	-----	20.21	25.77	13.82	18.51	19.91	13.76
Trimmings.....	21.47	27.54	15.08	30.00	32.04	17.31	17.07	22.02	15.25	14.32	15.72	13.40

¹⁸ It should be remembered that all weekly earnings data presented in this report are based on regular rates of pay, excluding extra rates paid for overtime.

