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WAGES AND REGULARITY OF EMPLOYMENT IN THE CLOAK, SUIT, AND SKIRT INDUSTRY

WITH PLANS FOR

APPRENTICESHIP FOR CUTTERS AND THE EDUCATION OF WORKERS IN THE INDUSTRY

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WHOLE NO. 147. WASHINGTON. JUNE 13, 1914.

PART I.—WAGES AND REGULARITY OF EMPLOYMENT IN THE CLOAK, SUIT, AND SKIRT INDUSTRY.

FOREWORD.

Unemployment is now recognized as perhaps the most serious of our social problems. Much of the present unemployment is due to business depression incident to the war, but even in "good times" the aggregate of unemployment is very great. The consequent waste and demoralization frustrate in large measure all other attempts to lessen the prevailing poverty and misery. The disease of unemployment is chronic. It results from the irregularity of our industrial operations, and the failure to organize labor supplies. The Government—Federal, State, and municipal—can aid through the establishment of comprehensive and effective labor bureaus and a wiser planning and distribution of public work. But the remedy for unemployment must come mainly through a change in the conditions of private businesses. There is some irregularity of employment in every branch of business, and in nearly every business concern; but the extent and conditions of unemployment differ widely in the several businesses. Diagnosis of the disease must precede the devising of remedies. If the disease of unemployment is to be fully eliminated, the diagnosis must be made of each branch of business, and indeed of each business concern. Not until the facts are known accurately and the extent of the evil appreciated can we hope for that widespread individual effort in social industrial invention and the comprehensive cooperation of the community, without which the regularization of employment now seems impossible of attainment.

It is believed that the study of unemployment in an important branch of the garment trade now presented will be of aid also to all those who may attempt to improve conditions in other lines of business.

The great strike of the New York garment workers in 1910 was settled on September 2 by the signing of the first protocol. That

agreement was entered into by the Cloak, Suit & Skirt Manufacturers' Protective Association, acting on behalf of the employer, and by the Joint Board of Cloak Makers' Union of Greater New York, and the International Ladies Garment Workers' Union, acting on behalf of the employees. The protocol settled all then existing grievances in respect to wages, hours, and conditions of employment, but it did far more than settle the strike: It established in a sense an industrial government. It introduced the preferential union shop. It perfected machinery for the avoidance or settlement of future grievances.[1]

Under the terms of the protocol, amendments to its provisions, including requests for increases of wages fixed therein, are considered in the first instance by the board of grievances, in which the employers and the employees have equal representation. In case of a deadlock in that board, the matter may be taken to the board of arbitration. In the spring of 1913 the unions requested that the wages of cutters, pressers, and other employees paid at weekly rates, be increased—the increases varying in different occupations from about 13 per cent to 57 per cent. No decision being reached by the board of grievances, the matter was presented to the board of arbitration. At the hearing before the arbitrators, it appeared that for many occupations the existing rates of wages were relatively high, the minimum for cutters being $25 a week, for sample makers $22, and for jacket upper pressers $21, but it was shown that the annual earnings of a large number of the workers were very small, because their employment was irregular and there were long periods of unemployment.

The arbitrators concluded that they could not pass properly upon the proposed increase of wages until they should have before them reliable data concerning the annual earnings of the workers in the several occupations, the character and degree of unemployment, the amount earned through supplemental employment, and the possibility of making more regular the employment of persons engaged in this industry. An investigation into these and related matters was thereupon undertaken at the joint expense of the manufacturers' association and of the unions. The investigation was under the supervision of the board acting through Dr. Walter E. Weyl,

[1] See Bulletins of the United States Bureau of Labor Statistics, No 98, Conciliation, arbitration, and sanitation in the cloak, suit, and skirt industry in New York City, and No. 144, Industrial court of the cloak, suit, and skirt industry of New York City.

one of its members. By permission of the Secretary of Labor, Mr. Charles H. Winslow, of the United States Bureau of Labor Statistics, who had previously made an extensive study of this industry and of its operation under the protocol, was granted leave of absence and assumed immediate charge of the investigation. It was obviously desirable to obtain for purposes of comparison similar data concerning the conduct of the industry in other cities. The Bureau of Labor Statistics, acting through Mr. Charles H. Winslow, upon due invitation, extended its investigation to the Boston shops, which are governed by a similar protocol (dated March 8, 1913).

The board of arbitration will present later its conclusions and recommendations on this subject.

LOUIS D. BRANDEIS,
Chairman.

WEEK WORKERS IN THE INDUSTRY IN NEW YORK CITY.

INTRODUCTION.

Under the protocol agreement of September 2, 1910, the Joint Board of Cloak Makers' Unions of Greater New York, on May 21, 1913, addressed to the Cloak, Suit and Skirt Manufacturers' Protective Association of that city the following communication:

Inquiry into the nature and causes of the numerous disputes arising daily between the members of our organization and the members of your association has led us to the conclusion that certain provisions of the protocol and of the rules of the board of grievances, approved by the board of arbitration on March 11, 1911, are in need of revision and amendment in the light of experience gained in the course of their practical application. Our joint board, therefore, authorized its president to appoint a committee, with himself as chairman, to consider and formulate proposed amendments to the protocol and the rules of the board of grievances and to confer with representatives of your association in relation to the same. The committee appointed by the president includes Messrs. * * * After hearing the report of the committee, the joint board approved the inclosed propositions, to be submitted to a conference of representatives of your association and our committee.

We deem it desirable to have Mr. Louis D. Brandeis preside at the conference, and we are informed by him that he would be willing to attend the conference. He suggested Saturday, June 7, as the date for holding the same.

If agreeable to you, we would suggest that an invitation to preside at the conference be tendered to him by your association as well as by our joint board.

If you have any propositions that you desire to submit to the conference for discussion, we should thank you for advising us of the same in advance of the conference, so as to expedite its proceedings.

Please let us know whether the date suggested by Mr. Brandeis is satisfactory to you.

Very truly, yours,

(Signed) THE CONFERENCE COMMITTEE.

In all, 15 propositions in the nature of desired amendments to the protocol of 1910 were submitted by the unions for the consideration of the joint conference just described.

The first of these, bearing particularly on this report, referred to the desired changes in the minimum weekly rates of the various occupations, established by the signing of the protocol. The unions maintained that as the prices of commodities of life have risen considerably since the signing of the agreement, rates of wages then specified should be correspondingly increased.

All the propositions that were submitted by the unions were under consideration at five full sessions of the joint conference, and at four sessions of a subcommittee of the conference appointed for that special purpose. At these conferences the representatives of the manufacturers' association took the position that because of the pending changes in the tariff laws of the country and general business conditions the time was not opportune for the granting of the desired increases of wages to the week workers. As the joint conference could reach no decision in the matter, all the propositions of the union were referred to the board of arbitration of the industry for final consideration.

The following is an extract from the findings of the board with particular reference to the question of raising the rates of the week workers:

> The board rules that, before finally passing on this proposition, an investigation of the industry covering the annual earnings of week workers and other relative matters be instituted under the direction of Dr. Walter E. Weyl, member of the board.

Upon motion, the president of the manufacturers' association, the chairman of the joint board of cloak makers' unions, and the chairman of the board of arbitration sent a joint request to the Secretary of Labor, at Washington, to permit Mr. Charles H. Winslow, of the United States Bureau of Labor Statistics, to assume immediate charge of the investigation. After permission was duly received, on August 6, 1913, offices for the created bureau of investigation were opened in the Fifth Avenue Building, New York City.

The following table shows the specific changes demanded in the wage rates for each occupation:

INCREASES DEMANDED IN WEEKLY WAGE RATES OF WORKERS.

Occupation.	Existing rate.	Rate demanded.
Cutters	$25	$30
Sample makers	22	25
Liners	(1)	18
Jacket upper pressers	21	25
Jacket under pressers	18	22
Reefer upper pressers	18	25
Reefer under pressers	14	22
Dress upper pressers	(1)	25
Dress under pressers	(1)	22
Piece pressers	13	16
Skirt upper pressers	19	23
Skirt under pressers	15	19
Drapers, female	(1)	16
Basters, female	14	16
Skirt finishers	10	12
Cleaners	(1)	8

[1] No existing rate.

As can be seen, the contemplated increases vary greatly in specific occupations, from 57.1 per cent, the highest, for reefer under pressers, to 13.6 per cent, the lowest, for sample makers. Specifically, the desired increases, by occupations, were: Reefer under pressers, 57.1 per cent; reefer upper pressers, 38.8 per cent; skirt under pressers, 26.7 per cent; piece pressers, 23.1 per cent; jacket under pressers, 22.2 per cent; skirt upper pressers, 21.1 per cent; skirt finishers, 20 per cent; cutters, 20 per cent; jacket upper pressers, 19.1 per cent; basters, female, 14.3 per cent; and sample makers, 13.6 per cent.

A preliminary report covering the results obtained from an investigation of 45 representative shops of the industry was submitted to the board of arbitration at its session of October 13, 1913. On the basis of that report the board granted substantial increases to pressers. The increase given to upper pressers was $2.50 per week and to under pressers $1.50 per week. These increases went into effect immediately, but were not retroactive. However, they were to be of a temporary nature, to cease on July 31, 1914, unless "rendered permanent either by mutual agreement or by some future award of the board." At the same time, recognizing the incompleteness of the information obtained up to that date, the board of arbitration deemed it necessary to continue and complete the statistical investigation. The investigation, however, was unexpectedly terminated in the first week of February, 1914.

In this investigation the pay-roll records of 302 establishments manufacturing cloaks, suits, and skirts in New York City were examined. Of these, 260 belonged to members of the Cloak, Suit and Skirt Manufacturers' Protective Association, the party to the protocol, and the other 42 had individual shop contracts with the unions, on terms essentially the same as those stipulated in the protocol agreement of September 2, 1910. The association shops examined included practically the shops of the entire membership of the manufacturers' association.

In all, the records of earnings of 14,301 workers during the year ending July 31, 1913, were secured. As stated above, these workers were found employed in 302 establishments; this number is about one-sixth of the total number of establishments of this kind in the city of New York. The number of people employed in all of the shops covered by this investigation, including pieceworkers, according to information furnished for each of the shops by the joint board of sanitary control of the industry, at the peaks of the seasons, was 29,000, 24,000 of whom were found in 251 shops belonging to members of the association. The former number, 29,000, is estimated as constituting one-half of the total number of people required to man the entire cloak, suit, and skirt industry of New York City.[1]

The average number of people found in each of the association shops was 95, slightly higher than the average for the 51 nonassociation shops investigated, 82.

The results presented in this report are based on information obtained from 90 of the association shops investigated, among which will be found some of the largest of the industry. As the work was done in a rather hurried manner, at times under peculiarly discouraging conditions, no effort could be made to distinguish between shops on the basis of the grade of goods manufactured. In fact, though of interest, this kind of information was not at all called for, as the agreement provides for flat uniform minimum rates irrespective of the kind of goods that specific establishments may manufacture.

The nonassociation shops were tabulated and analyzed separately with a view of making them the basis of comparison of standards of wages and hours in association and nonassociation shops.

As the investigation was terminated unexpectedly, there still remain a great number of shops whose records of the earnings of week workers are complete, ready for tabulation and analysis.

A vigorous effort was made to secure information regarding the hours of work as well as of earnings of week workers employed by so-called contracting establishments. Field agents reported that all of the establishments visited—about 40—had no records whatsoever. Most of the contractors, in paying off their help, use what they call "memorandum slips"; the payments due to various workers are figured out on slips of paper, which, after the payments have been made, are destroyed.

SUMMARY.

The report shows great seasonal variations in employment in the cloak, suit, and skirt industry. Pay-roll data for all productive labor in 75 association shops indicate that the year is made up of two busy

[1] General Survey of Sanitary Conditions in Shops of the Cloak Industry, Joint Board of Sanitary Control, p. 7.

seasons and two dull seasons, the busy seasons lasting 14 weeks, from the end of July to the latter part of October, and 12 weeks, from the latter part of January to the middle of April, and the dull seasons lasting 12 weeks, from the end of October to the latter part of January, and 14 weeks, from the middle of April to the latter part of July. The pay roll for the busiest week in the year (the last week in February) was over 280 per cent greater than that for the dullest (the second week in December).

The number of week workers in 21 occupations in 90 association shops and their earnings from week to week indicate similar busy and dull seasons, the number of employees in the maximum week being 90 per cent greater than the number in the minimum week and their earnings 196 per cent greater in the maximum than in the minimum week.

Exact conclusions as to the proportion of employees permanently employed, that is, employed up to the full extent of employment afforded by the industry, can not be drawn from the data secured, but the available information indicates that the proportion is small. A total of 4,858 individual schedules covering 16 occupations were obtained in the 90 association shops investigated and of these 860 showed that the employee had worked from 40 to 52 weeks. Assuming that employees working this length of time in one shop were permanently employed, this would seem to show that less than 18 per cent were permanent. It is apparent that this, however, is below the real proportion because the above figures include many duplications, the elimination of which would reduce the total number and at the same time, by combining the time each individual had worked in the various shops, would tend to increase the number of those in the group working from 40 to 52 weeks, thus increasing the proportion of workers in that group. It was not possible to eliminate the duplications for all the occupations, but an effort to do so for cutters resulted in reducing the total number from 1,295 to 1,045 and in increasing the number reported as working from 40 to 52 weeks from 184 to 202, thus increasing the per cent of cutters classed as permanently employed from 14.2 to 19.3.

While the schedules show that after eliminating duplications 1,045 individual cutters were actually employed during the year, the pay rolls indicate that when the 90 shops are considered together 518 was the maximum number employed in any week, and was therefore a sufficient number to do this work for the whole year. The pay rolls of the 90 shops combined also indicate that 227 was the maximum number needed from 40 to 52 weeks, or in other words, that 43.8 per cent of the maximum number required for the shortest period could be permanently employed. But as explained on page 34 the fluctuations in number of employees in the shops taken separately are not

uniform and individual schedules show that after all possible elimination of duplications only 202 cutters were actually employed 40 to 52 weeks, or only 39 per cent of the number necessary for the season requiring the greatest number of cutters.

Among the 16 occupations studied cutters, however, had the smallest percentage of permanent employment. Approximate figures for these 16 occupations indicate that after complete elimination of duplicate records about 50 per cent of the number required in the maximum week were employed from 40 to 52 weeks, though the proportion of these to the whole number actually employed during the year as shown by individual schedules would be considerably less.

According to the pay rolls only 1,952 employees in the 16 occupations studied were required in the week showing the largest number, while the individual schedules, as stated above, show a total of 4,858. If the same proportion of duplications were eliminated from this total as were eliminated from the total for cutters in the special study of that occupation (19 per cent) the number would still be more than twice the maximum number required according to the pay rolls. Whatever may be the cause it is apparent that there is a considerable surplusage of workers actually employed during the year above the number required at the busiest season.

Regarding the earnings of the employees, the surplusage just mentioned would lead to the conclusion that a considerable number do not receive for their work in the 90 shops investigated an adequate amount during the year for their support. Thus, if employment were equally apportioned, the average yearly earnings possible for cutters, based on the maximum number required in the 90 shops in any week (518) and the total annual pay roll ($433,315), would be $837, but a comparison of the actual number employed during the year (1,045) with the pay roll would indicate average actual earnings of only $415. As the individual schedules for other occupations than cutters also show a great excess in the number actually employed during the year as compared with the maximum number required at the busiest season, the above conclusion as to the insufficiency of the earnings in the 90 shops for the number of persons actually employed in all the occupations would seem to be justified.

SCOPE OF THE INVESTIGATION AND METHODS EMPLOYED.

The primary purpose of this investigation was to ascertain what the week workers in each of the occupations included in the cloak, suit, and skirt industry of New York City earn at their trade—not in a day, a week, or a month, or for the season, but in the course of a year. It was not necessary to seek information or to tabulate the data obtained so as to show rates of pay, because by reason of the protocol agreement between the unions and the manufacturers' association

the rates are definitely established for each occupation among the workers who are employed and paid on a weekly basis.

Only week workers were covered in this study, because pieceworkers often work in teams or employ a helper or helpers whose names and earnings do not appear separately on the books of the manufacturer. Moreover, certain week workers, notably the sample makers, have been omitted, since they are not uniformly paid on a time basis, and because many of them alternate between two distinct occupations, i. e., sample makers and piece tailors, in both of which they are likely to employ helpers.

There are two general methods in use in such investigations as this. The first is sometimes called the "census" method; that is, it is a complete enumeration of all the facts which have a bearing upon the situation. The second is called the representative method, and consists in taking a sufficiently large number of cases or facts to warrant a conclusion respecting all cases or facts.

It was deemed best in this investigation to make the study as intensive and complete as possible. The original purpose was therefore to make a complete enumeration of the employees and earnings in all of the shops operated by members of the Manufacturers' Protective Association. An effort was made also to secure similar data from as many as possible of the nonassociation, or "independent," shops, as those which are not under the protocol are called.

A complete census of the industry was, however, found to be impracticable. Full information was obtained from only 13 independent shops, and owing to changes of ownership and management, or to imperfect or incomplete records, the data secured from a considerable number of the association shops could not be tabulated. Finally, it was deemed advisable to confine the tabulation and analysis of statistics to 90 association shops and 13 independent shops. The result is, therefore, a representative study rather than a complete census, though by reason of the amount of data secured it may be regarded as quite as satisfactory in many ways as a full enumeration would be.

There are two ways of ascertaining yearly earnings: First, from the individual employee, and second, from his employer or employers. Each of these sources of information has its advantages and disadvantages. It is apparent that to gather information at first hand from all of the individuals employed in the cloak, suit, and skirt industry would be financially impracticable, if not physically impossible. Moreover, if made, such a census would be unreliable, because individuals generally do not keep books, and can not remember accurately their working experience during a complete year. Attempts were made to secure information directly from employees in two ways. In one of these, personal interviews were had with a

certain number of cutters and pressers, but the number who could be reached in this way was so small, and it was so unusual to find persons who could give accurate information that the plan was given up. The other method was based upon schedules filled out by workers in these shops and gathered through the shop chairmen. In this way 1,429 schedules were obtained and tabulated, but subsequent investigations showed them to be so full of errors that they were discarded as entirely unreliable. Only one way remained, therefore, to obtain the information desired, namely, to go to the employers' books.

Having access to the employers' books, the question arose as to what was to be done with them. A simple count could have been made of the number of employees in each week, in each occupation, and the amount of the weekly pay roll by occupations could have been taken from the different employers' books. This was not deemed sufficient, however, and it was decided to prepare a separate schedule for each employee, which should contain the name, sex, and occupation of the employee, with full information concerning his days, hours (regular and overtime), and earnings for each of the 52 weeks of the year in which his name appeared on the pay-roll books. It is apparent that by combining these separate individual schedules by shops, and then grouping the shops together, a knowledge would be obtained of the amount of employment afforded by each shop and by the industry as a whole, and of the distribution of employment throughout the year. Moreover, it was hoped that it would be possible, by the use of these individual schedules, to trace the individual workers from shop to shop, and so to obtain the still more important information as to individual opportunities for earning a livelihood in the industry.

Occupations for which information was secured were: Head cutter, skirt cutter, canvas cutter, cutter, head presser, dress upper presser, jacket upper presser, jacket under presser, reefer upper presser, reefer under presser, skirt upper presser, skirt under presser, piece presser, sample liner, skirt baster, jacket finisher, skirt finisher, draper, trimmer, cleaner.

It sometimes happened, however, that employees who worked at practically the same sort of work in the occupations just mentioned were carried under different designations, in which case the instructions were that cards should be filled out, and if they did not come within the scope of the investigation they were canceled.

PROPORTION OF WEEK WORKERS' WAGES TO TOTAL PAY ROLL.

As has been noted, this inquiry covered only those persons employed and paid on a time basis. It was deemed desirable to ascertain what proportion the wages of these week workers bore to the total pay roll of the industry. A second schedule was used for this purpose, and the total weekly pay roll of each shop, exclusive of salaried employees, office force, foremen, models, designers, and salesmen, was obtained for each week and for the year as a whole. It was found impracticable to secure the data called for in this schedule from all of the 90 shops covered by the tabulations presented in this report. Data were available, however, from 32 firms, and from these data the following table was prepared.

TABLE 1.—PROPORTION OF TOTAL WAGES OF WEEK WORKERS TO THE TOTAL PAY ROLL, IN 32 SHOPS, AUGUST, 1912, TO JULY, 1913.

Shop.	Total wages of week workers.	Total pay roll for all employees.	Per cent week workers' wages are of total pay roll.	Shop.	Total wages of week workers.	Total pay roll for all employees.	Per cent week workers' wages are of total pay roll.
No. 6	$15,522	$66,961	23.2	No. 136	$10,576	$31,445	33.6
No. 16	61,608	302,707	20.4	No. 159	8,411	29,470	28.5
No. 17	17,885	64,953	27.5	No. 160	19,549	67,730	28.9
No. 20	9,291	28,535	32.6	No. 168	9,625	30,044	32.0
No. 21	25,809	81,636	31.6	No. 172	10,166	39,908	25.5
No. 25	21,849	89,997	24.3	No. 179	15,601	56,580	27.6
No. 27	15,344	58,909	26.0	No. 210	13,361	67,690	19.7
No. 32	60,716	173,423	35.0	No. 217	16,833	63,246	26.6
No. 36	14,859	38,103	39.0	No. 223	105,506	502,869	21.0
No. 50	16,397	42,663	38.4	No. 228	14,517	40,057	36.2
No. 58	12,502	53,401	23.4	No. 240	32,867	201,809	16.3
No. 61	16,413	99,214	16.5	No. 254	39,294	112,901	34.8
No. 62	6,394	38,318	16.7	No. 262	17,764	56,563	31.4
No. 65	18,929	79,456	23.8	No. 270	10,382	38,850	26.7
No. 80	29,249	93,276	31.4	No. 276	18,082	77,750	23.3
No. 84	18,723	77,297	24.2				
No. 122	35,254	132,699	26.6	Total	739,278	2,938,460	25.2

It will be noted that the proportion of the pay roll going to week workers varies considerably. In some shops it is as high as 38 or 39 per cent; in others, only a little above 16 per cent. It was not within the scope of this investigation to make a close study of the character of the business or the methods of work in the different shops, therefore it is not possible to say why these variations occur. This list of 32 shops was so selected, however, as to warrant the conclusion that the average, 25.2 per cent, is fairly representative of the industry as a whole.

CHARACTER OF DATA AS TO EMPLOYMENT AND EARNINGS.

Schedule 1 calls for the number of days worked in each week, but so few shops afforded complete records of this fact that it was found necessary to abandon the attempt to secure this information. All tabulations contained in this report, therefore, which show extent of employment, are based either upon the week or upon the hour as a unit. These two units give somewhat different results, both as to average earnings and as to actual amount of employment. In every case an hour means the actual amount of time spent at work. A week, on the other hand, may mean anything from 1 hour to 50 hours, or even 62½ hours where the full allowable amount of overtime is worked. In other words, a week means simply that an employee appeared upon the pay roll of a shop in that week. It should be noted, however, that the schedules disclose very few individuals who worked less than one day in a week, and, on the other hand, that the full 50-hour week was the rule, though in the dull season broken weeks were very common.

Earnings computed on an hourly basis will be found to vary from the established rate in only one direction, because regular hours were paid for at full rates and overtime hours at higher rates—usually double. On the other hand, weekly earnings will be found to fluctuate both above and below the established rate, part time tending to put them below, and overtime and extra rates of pay, which occurred in a number of instances, tending to carry them above.

The year chosen for this study was necessarily a 12-month period which had ended prior to the beginning of the field work. Obviously it was desirable to bring the period covered as close as possible to the time of making the investigation, in order that fairly fresh records might be dealt with and to disclose conditions approximately as they were at the time the demand for increased wages was made. The year opened and closed in the early part of the busy summer season.

All of the tabulations show a wide fluctuation during the year, both in number of employees and in earnings. It was well known to those acquainted with the industry that the employment afforded by it was highly irregular. The dull and busy seasons could also have been located with a fair degree of precision without a statistical investigation, but the present study has provided the first and only real opportunity to measure accurately the degree of fluctuation and to show the exact extent of the dull and busy periods.

WEEKLY PAY ROLLS FOR ALL PRODUCTIVE LABOR IN 75 ASSOCIATION SHOPS.

In Table 2, which follows, the total pay roll of 75 association shops is given week by week and for the entire year. While there was some variation as to pay-roll periods in individual establishments, the periods shown in this and other tables of the report are believed to be fairly representative of the whole industry and begin with the first full week in August.

TABLE 2.—TOTAL WEEKLY AMOUNT OF PAY ROLL FOR ALL PRODUCTIVE LABOR IN 75 ASSOCIATION SHOPS, AND PER CENT OF AVERAGE WEEKLY AMOUNT, AUGUST, 1912, TO JULY, 1913.

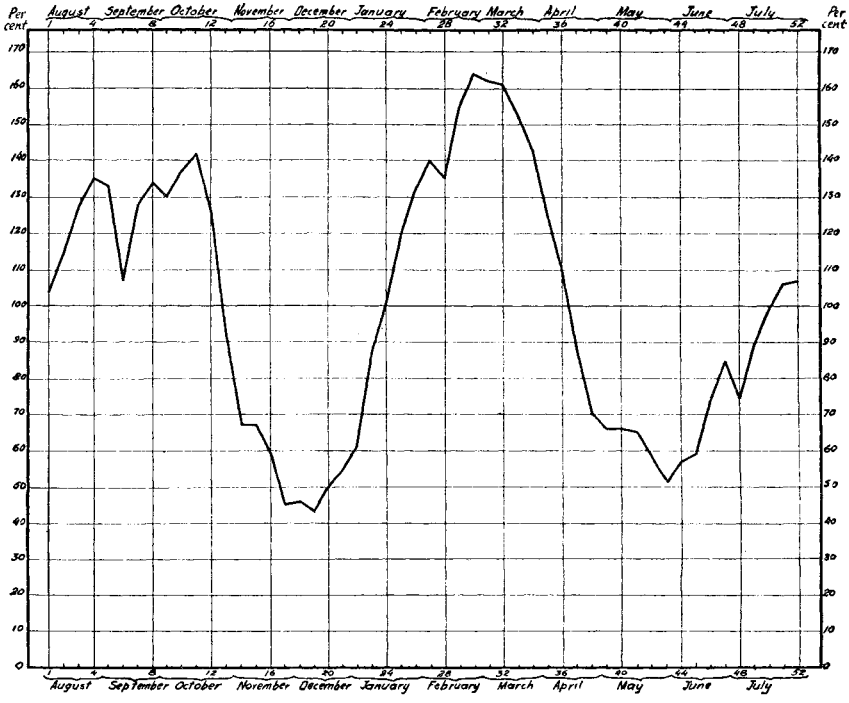
Month.	Week No.	Amount of pay roll.	Per cent of average weekly pay roll.	Month.	Week No.	Amount of pay roll.	Per cent of average weekly pay roll.
August	1	$97,807	103.6	February	27	$131,623	139.5
	2	108,268	114.7		28	127,052	134.6
	3	119,427	126.5		29	146,148	154.9
	4	127,786	135.4		30	155,148	164.4
September	5	125,940	133.4	March	31	152,640	161.7
	6	101,237	107.3		32	152,119	161.2
	7	120,705	127.9		33	143,904	152.5
	8	126,015	133.5		34	134,834	142.9
October	9	122,968	130.3	April	35	118,227	125.3
	10	129,446	137.2		36	102,869	109.0
	11	133,683	141.7		37	82,540	87.5
	12	118,942	126.0		38	65,845	69.8
November	13	87,283	92.5	May	39	62,501	66.2
	14	62,907	66.7		40	62,030	65.7
	15	63,264	67.0		41	61,475	65.1
	16	55,968	59.3		42	54,695	58.0
December	17	42,838	45.4	June	43	47,798	50.6
	18	43,109	45.7		44	54,125	57.4
	19	40,741	43.2		45	55,904	59.2
	20	47,271	50.1		46	69,745	73.9
January	21	52,042	55.1	July	47	80,141	84.9
	22	57,654	61.1		48	69,495	73.6
	23	82,565	87.5		49	83,725	88.7
	24	94,001	99.6		50	92,937	98.5
	25	113,005	119.7		51	100,041	106.0
	26	124,495	131.9		52	100,586	106.6
				Total		4,907,514	
				Average		94,375	100.0

It will be noted that the year is made up of two busy seasons and two dull seasons. The third week in October and the last in February are the busiest weeks in the two busy seasons, and the second week in December and the last in May the dullest in the two dull seasons of the year. It is apparent from the column of index numbers showing percentage that each weekly pay roll is of the average for the year, that from the latter part of July until the latter part of October, or for 14 weeks, the amount of employment is above the yearly average. Then for 12 weeks, earnings are below the average. This is followed by a period of 12 busy weeks, which in turn is succeeded by 14 weeks of low earnings. It should be observed that the pay roll for the busiest week in the year, the last week in February,

is over 280 per cent greater than that for the dullest week, the second week in December. The fluctuations indicated in this table are graphically shown in the accompanying chart (Chart 1).

CHART 1.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 75 ASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS FOR ALL PRODUCTIVE LABOR, AUGUST, 1912, TO JULY, 1913.

[Average weekly pay roll for the year=100.]



WEEKLY EARNINGS OF WEEK WORKERS IN 21 OCCUPATIONS IN 90 ASSOCIATION SHOPS.[1]

The following table, which gives the total number of week workers employed each week in 90 association shops and their earnings, week by week, indicates the same busy and dull periods as Table 2, though the low points of the two tables do not exactly coincide. The busy season apparently opens a little earlier for the week workers than for the pieceworkers, whose earnings constitute 75 per cent of those in Table 2. The correspondence between these two tables is so close, however, that there can be no doubt of the reliability of either as an indication of the fluctuations of the industry as a whole.

[1] The test analysis of the data relating to 90 association shops in New York City was made by Carroll W. Doten.

TABLE 3.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 21 OCCUPATIONS IN 90 ASSOCIATION SHOPS, AUGUST, 1912, TO JULY, 1913.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	1,756	$31,280	103.4	102.8	February	27	2,067	$41,571	121.7	136.6
	2	1,862	35,343	109.6	116.2		28	2,078	43,288	122.3	142.3
	3	1,987	38,887	117.0	127.8		29	2,122	45,981	124.9	151.1
	4	2,053	41,078	120.9	135.0		30	2,152	46,711	126.7	153.5
	5	2,048	41,728	120.6	137.1		31	2,158	45,605	127.0	149.9
September	6	2,007	30,299	118.1	99.6	March	32	2,133	44,215	125.6	145.3
	7	2,033	39,496	119.7	129.8		33	2,092	43,260	123.1	142.2
	8	2,021	39,148	119.0	128.7		34	2,014	39,652	118.6	130.3
	9	2,003	38,051	117.9	125.1		35	1,885	34,489	111.0	113.3
	10	2,002	41,275	117.8	135.6	April	36	1,753	30,021	103.2	98.7
October	11	1,975	40,104	116.3	131.8		37	1,640	27,240	96.5	89.5
	12	1,847	35,923	108.7	118.1		38	1,507	21,517	88.7	70.8
	13	1,621	27,467	95.4	90.3		39	1,477	21,106	86.9	69.4
	14	1,363	20,770	80.2	68.3		40	1,465	21,823	86.2	71.7
November	15	1,355	20,625	79.8	67.8	May	41	1,393	21,033	82.0	69.1
	16	1,302	19,593	76.6	64.4		42	1,332	19,493	78.4	64.1
	17	1,183	16,635	69.6	54.7		43	1,182	17,273	69.6	56.8
	18	1,120	15,749	65.9	51.8		44	1,228	19,185	72.3	63.1
December	19	1,134	15,935	66.8	52.4	June	45	1,309	19,746	77.1	64.9
	20	1,207	18,117	71.1	59.5		46	1,488	24,812	87.6	81.5
	21	1,233	18,647	72.6	61.3		47	1,608	28,036	94.5	92.1
	22	1,340	20,466	78.9	67.3		48	1,550	25,124	91.2	82.6
January	23	1,597	26,397	94.0	86.8		49	1,655	28,704	97.4	94.3
	24	1,768	31,196	104.1	102.5	July	50	1,739	30,608	102.4	100.6
	25	1,905	35,378	112.1	116.3		51	1,787	31,926	105.2	104.9
	26	2,015	38,919	118.6	127.9		52	1,786	31,320	105.1	102.9
						Total	.....	.....	1,582,245	.....	.....
						Average	.....	1,699	30,428	100.0	100.0

The fluctuations in Table 3 are not quite so great as those in Table 2, the earnings for the busiest week being only 196 per cent greater than for the dullest week. The number of employees shows even less variation, the largest number being only 90 per cent in excess of the least number. This variation between the index for earnings and that for number of employees is due, on the one hand, to full-time and overtime work in the busy seasons, and, on the other, to part-time or fractional weeks in the dull seasons.

FLUCTUATIONS IN EMPLOYMENT AND EARNINGS IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS.

No average weekly earnings are shown in Table 3, because they would be practically meaningless owing to the wide range in rates of pay among the 21 occupations included. In all other respects this table is like the following table which covers each of the principal occupations.

Table No. 4 was constructed by merely adding together the data on the individual schedules and shows the number of employees and amount of earnings each week for the 52 weeks of the year. Attention is again called to the fact that the unit upon which this table is based is not necessarily a full week, but may be only one day in some cases. In other words, a week merely means that a worker appeared on the pay roll of the shop in which the schedule is taken in that particular week.

The number of employees, in column 3 of the table, is the number of persons shown by the records to have worked in the 90 shops during each of the weeks. The total in this column is the number of weeks of work for one man in the 90 shops during the entire year, or, as it is sometimes called, the number of "man-weeks."

The total weekly pay roll, in column 4 of the table, represents the total amount paid out in all of the shops to all of the workers in a specific occupation.

The average weekly earnings, in column 5 of the table, were obtained by dividing the figures of column 4 by the figures in column 3, for each week and for the total of 52 weeks. The figure shown in the last line of the table as the average weekly earnings for the year represents the average amount earned by a worker during each of the weeks when he was employed. It does not represent, however, the average amount earned during each of the 52 weeks of the year, but only during those weeks in which he worked.

The last two columns of the table show for each week the relative number of employees and the relative weekly pay roll and are designed to bring these two items to a comparable basis. The relative for each week was obtained by dividing the amount for each week by the average for the year, the result being expressed as a percentage. In Table 4, for cutters, for example, the relative number of men in the first week (111.4) means that the number of cutters in the first week (381) was 11.4 per cent higher than the average weekly number for the year.

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	381	$9,220	$24.20	111.4	110.6	February	27	490	$12,916	$26.36	143.3	155.0
	2	421	10,763	25.57	123.1	129.2		28	504	13,868	27.52	147.4	166.2
	3	450	11,723	26.05	131.6	140.7		29	518	14,136	27.29	151.5	169.5
	4	464	12,090	26.06	135.7	145.1		30	507	13,377	26.38	148.2	160.4
	5	456	11,837	25.96	133.3	142.1		31	490	12,510	25.53	143.3	150.1
September	6	436	8,655	19.85	127.5	103.9	March	32	461	11,851	25.71	134.8	142.2
	7	434	10,339	23.82	126.9	124.1		33	459	11,572	25.21	134.2	138.9
	8	435	10,939	25.15	127.2	131.3		34	428	10,753	25.12	125.1	129.0
	9	453	11,485	25.35	132.4	137.8		35	351	8,487	24.18	102.6	101.8
October	10	459	11,880	25.88	134.2	142.6	April	36	317	7,529	23.75	92.7	90.4
	11	429	10,950	25.52	125.4	131.4		37	280	6,684	23.87	81.9	80.2
	12	359	8,809	24.54	105.0	105.7		38	248	5,633	22.71	72.5	67.6
	13	267	6,270	23.48	78.1	75.2		39	224	4,904	21.89	65.5	58.9
	14	207	4,604	22.24	60.5	55.3		40	224	4,730	21.12	65.5	56.8
November	15	206	4,728	22.95	60.2	56.7	May	41	203	4,501	22.17	59.4	54.0
	16	199	4,471	22.47	58.2	53.7		42	189	4,196	22.20	55.3	50.4
	17	169	3,595	21.27	49.4	43.1		43	169	3,852	22.79	49.4	46.2
	18	170	3,546	20.86	49.7	42.6		44	205	4,615	22.51	59.9	55.4
December	19	187	4,093	21.89	54.7	49.1	June	45	243	5,396	22.21	71.0	64.8
	20	227	5,082	22.39	66.4	61.0		46	294	6,828	23.22	86.0	81.9
	21	234	5,349	22.86	68.4	64.2		47	303	7,373	24.33	88.6	88.5
	22	251	5,714	22.76	73.4	68.6		48	284	6,738	23.73	83.0	80.9
	23	311	7,268	23.37	90.9	87.2		49	327	7,794	23.83	95.6	93.5
January	24	386	9,029	23.39	112.9	108.4	July	50	362	8,716	24.08	105.8	104.6
	25	442	10,725	24.26	129.2	128.7		51	389	9,459	24.32	113.7	113.5
	26	479	11,987	25.03	140.1	143.9		52	404	9,746	24.12	118.1	117.0
							Total			433,315			
							Average		342.02	8,333	24.36	100.0	100.0

SKIRT CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	11	$229	$20.82	71.3	70.8	February	27	17	$405	$23.82	110.2	125.3
	2	13	281	21.62	84.3	86.9		28	15	350	23.33	97.3	108.3
	3	14	317	22.64	90.8	98.1		29	14	364	26.00	90.8	112.6
	4	15	320	21.33	97.3	99.0		30	15	402	26.80	97.3	124.4
	5	15	335	22.33	97.3	103.6		31	18	432	24.00	116.7	133.6
September	6	13	212	16.31	84.3	65.6	March	32	17	396	23.29	110.2	122.5
	7	14	284	20.29	90.8	87.9		33	16	372	23.25	103.8	115.1
	8	14	310	22.14	90.8	95.9		34	17	367	21.59	110.2	113.5
	9	14	298	21.29	90.8	92.2		35	21	381	18.14	136.2	117.9
October	10	13	289	22.23	84.3	89.4	April	36	19	431	22.68	123.2	133.3
	11	12	270	22.50	77.8	83.5		37	19	434	22.84	123.2	134.3
	12	12	254	21.17	77.8	78.6		38	19	346	18.21	123.2	107.0
	13	11	207	18.82	71.3	64.0		39	16	316	19.75	103.8	97.8
	14	11	208	18.91	71.3	64.3		40	18	383	21.28	116.7	118.5
November	15	12	201	16.75	77.8	62.2	May	41	19	413	21.74	123.2	127.8
	16	9	175	19.44	58.4	54.1		42	17	354	20.82	110.2	109.5
	17	9	187	20.78	58.4	57.8		43	17	353	20.76	110.2	109.2
	18	10	178	17.80	64.8	55.1		44	20	369	18.45	129.7	114.2
December	19	11	209	19.00	71.3	64.7	June	45	21	448	21.33	136.2	138.6
	20	12	236	19.67	77.8	73.0		46	20	402	20.10	129.7	124.4
	21	11	213	19.36	71.3	65.9		47	20	427	21.35	129.7	132.1
	22	10	205	20.50	64.8	63.4		48	23	436	18.96	149.1	134.9
January	23	15	272	18.13	97.3	84.1	July	49	25	462	18.48	162.1	142.9
	24	14	294	21.00	90.8	90.9		50	20	397	19.85	129.7	122.8
	25	17	374	22.00	110.2	115.7		51	15	328	21.87	97.3	101.5
	26	16	364	22.75	103.8	112.6		52	16	322	20.13	103.8	99.6
							Total			16,812			
							Average		15.42	323.23	20.96	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued

CANVAS CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	49	$780	$15.92	112.8	109.5	February	27	57	$971	$17.04	131.3	136.3
	2	50	866	17.32	115.1	121.5		28	56	991	17.70	129.0	139.1
	3	53	957	18.06	122.1	134.3		29	54	1,024	18.96	124.4	143.7
	4	60	1,033	17.22	138.2	145.0		30	55	1,056	19.20	126.7	148.2
September	5	56	992	17.71	129.0	139.2	March	31	54	996	18.44	124.4	139.8
	6	53	704	13.28	122.1	98.8		32	52	916	17.62	119.8	128.5
	7	55	888	16.15	126.7	124.6		33	51	901	17.67	117.4	126.4
	8	54	905	16.76	124.4	127.0		34	51	884	17.33	117.4	124.1
	9	51	902	17.69	117.4	126.6		35	49	796	16.24	112.8	111.7
October	10	51	964	18.90	117.4	135.3	April	36	46	713	15.50	105.9	100.1
	11	50	894	17.88	115.1	125.5		37	39	602	15.44	89.8	84.5
	12	48	812	16.92	110.5	113.9		38	31	443	14.29	71.4	62.2
	13	36	600	16.67	82.9	84.2		39	28	472	16.86	64.5	66.2
November	14	33	534	16.18	76.0	74.9	May	40	32	455	14.22	73.7	63.9
	15	30	488	16.27	69.1	68.5		41	32	472	14.75	73.7	66.2
	16	27	422	15.63	62.2	59.2		42	27	387	14.33	62.2	54.3
	17	28	421	15.04	64.5	59.1		43	23	365	15.87	53.0	51.2
December	18	27	396	14.67	62.2	55.6	June	44	26	407	15.65	59.9	57.1
	19	28	417	14.89	64.5	58.5		45	35	503	14.37	80.6	70.6
	20	30	443	14.77	69.1	62.2		46	38	599	15.76	87.5	84.1
	21	31	477	15.39	71.4	66.9		47	44	698	15.86	101.3	98.0
January	22	37	532	14.38	85.2	74.7	July	48	42	665	15.83	96.7	93.3
	23	47	689	14.66	108.2	96.7		49	44	703	15.98	101.3	98.7
	24	53	792	14.94	122.1	111.1		50	48	772	16.08	110.5	108.3
	25	54	845	15.65	124.4	118.6		51	50	791	15.82	115.1	111.0
	26	54	922	17.07	124.4	129.4		52	49	798	16.29	112.8	112.0
							Total			37,055			
							Average		43.42	712.60	16.41	100.0	100.0

JACKET UPPER PRESSERS.

August	1	378	$6,752	$17.86	97.6	98.8	February	27	430	$8,769	20.39	111.1	128.3
	2	400	7,693	19.23	103.3	112.6		28	432	9,122	21.12	111.6	133.5
	3	435	8,573	19.71	112.3	125.4		29	443	9,863	22.26	114.4	144.4
	4	446	9,361	20.99	115.2	137.0		30	447	10,302	23.05	115.4	150.7
September	5	451	9,536	21.14	116.5	139.5	March	31	459	10,528	22.94	118.5	154.0
	6	449	6,827	15.20	116.0	99.9		32	471	10,350	21.97	121.6	151.4
	7	467	9,506	20.36	120.6	139.1		33	465	10,071	21.66	120.1	147.4
	8	457	9,027	19.75	118.0	132.1		34	445	8,996	20.22	114.9	131.6
	9	447	8,180	18.30	115.4	119.7		35	437	8,347	19.10	112.9	122.1
October	10	444	9,512	21.42	114.7	139.2	April	36	416	7,070	17.00	107.4	103.4
	11	456	9,620	21.10	117.8	140.8		37	404	6,365	15.75	104.3	93.1
	12	446	9,429	21.14	115.2	138.0		38	379	4,718	12.45	97.9	69.0
	13	421	7,619	18.10	108.7	111.5		39	370	4,898	13.24	95.6	71.7
November	14	361	5,299	14.68	93.2	77.5	May	40	358	5,131	14.33	92.5	75.1
	15	348	5,043	14.49	89.9	73.8		41	348	4,831	13.88	89.9	70.7
	16	331	4,825	14.58	85.5	70.6		42	336	4,351	12.95	86.8	63.7
	17	301	4,004	13.30	77.7	58.6		43	284	3,472	12.23	73.3	50.8
December	18	279	3,545	12.71	72.1	51.9	June	44	286	3,993	13.96	73.9	58.4
	19	282	3,376	11.97	72.8	49.4		45	292	3,714	12.72	75.4	54.3
	20	280	3,726	13.31	72.3	54.5		46	333	5,015	15.06	86.0	73.4
	21	280	3,531	12.61	72.3	51.7		47	357	6,055	16.96	92.2	88.6
January	22	307	3,874	12.62	79.3	56.7	July	48	342	5,154	15.07	88.3	75.4
	23	358	5,775	16.13	92.5	84.5		49	367	6,223	16.96	94.8	91.1
	24	386	6,819	17.67	99.7	99.8		50	391	6,601	16.88	101.0	96.6
	25	400	7,612	19.03	103.3	111.4		51	408	7,234	17.73	105.4	105.8
	26	427	8,286	19.41	110.3	121.2		52	397	6,871	17.31	102.5	100.5
							Total			355,394			
							Average		387.19	6,835	17.65	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

JACKET UNDER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	303	$4,324	$14.27	103.3	102.5	February	27	369	$6,301	$17.08	125.9	149.3
	2	329	5,074	15.42	112.2	120.3		28	371	6,486	17.48	126.5	153.7
	3	347	5,730	16.51	118.4	135.8		29	375	7,138	19.03	127.9	169.2
	4	364	6,290	17.28	124.2	149.1		30	391	7,459	19.08	133.4	176.8
September	5	371	6,528	17.60	126.5	154.7	March	31	405	7,472	18.45	138.1	177.1
	6	364	4,495	12.35	124.2	106.5		32	405	7,309	18.05	138.1	173.2
	7	369	6,221	16.86	125.9	147.4		33	374	6,812	18.21	127.6	161.5
	8	369	6,121	16.59	125.9	145.1		34	365	6,284	17.22	124.5	148.9
	9	357	5,538	15.51	121.8	131.3		35	347	5,110	14.73	118.4	121.1
October	10	355	6,398	18.02	121.1	151.5	April	36	294	3,820	12.99	100.3	90.5
	11	354	6,343	17.92	120.7	150.4		37	265	3,290	12.42	90.4	78.0
	12	342	5,693	16.65	116.6	134.9		38	246	2,226	9.05	83.9	52.8
	13	307	4,090	13.32	104.7	96.9		39	243	2,172	8.94	82.9	51.5
November	14	241	2,705	11.22	82.2	64.1	May	40	237	2,230	9.41	80.8	52.9
	15	234	2,263	9.67	79.8	53.6		41	210	2,084	9.92	71.6	49.4
	16	226	2,278	10.08	77.1	54.0		42	199	1,873	9.41	67.9	44.4
	17	193	1,719	8.91	65.8	40.7		43	175	1,514	8.65	59.7	35.9
December	18	165	1,360	8.24	56.3	32.2	June	44	183	1,857	10.15	62.4	44.0
	19	158	1,258	7.96	53.9	29.8		45	192	1,866	9.72	65.5	44.2
	20	168	1,453	8.65	57.3	34.4		46	247	3,244	13.13	84.2	76.9
	21	179	1,711	9.56	61.1	40.6		47	289	3,946	13.65	98.6	93.5
January	22	215	2,364	11.00	73.3	56.0	July	48	274	3,194	11.66	93.5	75.7
	23	266	3,398	12.77	90.7	80.5		49	297	4,097	13.79	101.3	97.1
	24	303	4,475	14.77	103.3	106.1		50	300	4,278	14.26	102.3	101.4
	25	325	5,058	15.56	110.8	119.9		51	322	4,522	14.04	109.8	107.2
	26	352	5,803	16.49	120.1	137.5		52	315	4,123	13.09	107.4	97.7
							Total			219,397			
							Average		293.19	4,219	14.39	100.0	100.0

SKIRT UPPER PRESSERS.

August	1	95	$1,576	$16.59	103.8	105.0	February	27	94	$1,774	$18.87	102.7	118.2
	2	95	1,655	17.42	103.8	110.3		28	94	1,821	19.37	102.7	121.4
	3	102	1,859	18.23	111.4	123.9		29	102	2,051	20.11	111.4	136.7
	4	107	1,955	18.27	116.9	130.3		30	106	2,264	21.36	115.8	150.9
September	5	105	2,030	19.33	114.7	135.3	March	31	107	2,194	20.50	116.9	146.2
	6	104	1,450	13.94	113.6	96.6		32	110	2,213	20.12	120.1	147.5
	7	99	1,869	18.88	108.1	124.6		33	113	2,295	20.31	123.4	152.9
	8	104	1,924	18.50	113.6	128.2		34	110	2,060	18.73	120.1	137.3
	9	102	1,797	17.62	111.4	119.8		35	102	1,783	17.48	111.4	118.8
October	10	99	1,816	18.34	108.1	121.0	April	36	100	1,679	16.79	109.2	111.9
	11	98	1,782	18.18	107.0	118.8		37	99	1,646	16.63	108.1	109.7
	12	94	1,505	16.01	102.7	100.3		38	97	1,400	14.43	105.9	93.3
	13	87	1,152	13.24	95.0	76.8		39	96	1,345	14.01	104.9	89.6
November	14	72	771	10.71	78.6	51.4	May	40	95	1,494	15.73	103.8	99.6
	15	72	913	12.68	78.6	60.8		41	93	1,389	14.94	101.6	92.6
	16	74	898	12.14	80.8	59.8		42	91	1,297	14.25	99.4	86.4
	17	66	755	11.44	72.1	50.3		43	84	1,175	13.99	91.7	78.3
December	18	66	759	11.50	72.1	50.6	June	44	79	1,184	14.99	86.3	78.9
	19	67	717	10.70	73.2	47.8		45	79	1,139	14.42	86.3	75.9
	20	70	865	12.36	76.5	57.6		46	83	1,286	15.49	90.7	85.7
	21	69	882	12.78	75.4	58.8		47	86	1,343	15.62	93.9	89.5
January	22	74	1,047	14.15	80.8	69.8	July	48	84	1,288	15.33	91.7	85.8
	23	87	1,210	13.91	95.0	80.6		49	89	1,464	16.45	97.2	97.6
	24	90	1,401	15.57	98.3	93.4		50	96	1,620	16.87	104.9	108.0
	25	94	1,596	16.98	102.7	106.4		51	93	1,531	16.46	101.6	102.0
	26	94	1,670	17.77	102.7	111.3		52	93	1,438	15.46	101.6	95.8
							Total			78,027			
							Average		91.56	1,501	16.39	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT UNDER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	37	$482	$13.03	115.4	113.4	February	27	44	$715	$16.25	137.3	168.1
	2	41	566	13.80	127.9	133.1		28	46	755	16.41	143.5	177.6
	3	45	677	15.04	140.4	159.2		29	44	781	17.75	137.3	183.7
	4	47	734	15.62	146.6	172.6		30	44	808	18.36	137.3	190.0
September	5	47	767	16.32	146.6	180.4	March	31	42	767	18.26	131.0	180.4
	6	45	534	11.87	340.4	125.6		32	44	754	17.14	137.3	177.3
	7	45	702	15.60	140.4	165.1		33	41	705	17.20	127.9	165.8
	8	42	644	15.33	111.0	151.5		34	41	663	16.17	127.9	155.9
October	9	39	612	15.69	121.7	143.9	April	35	38	519	13.66	118.5	122.1
	10	37	600	16.22	115.4	141.1		36	35	409	11.69	109.2	96.2
	11	40	601	15.03	124.8	141.3		37	32	309	9.66	99.8	72.7
	12	38	506	13.32	118.5	119.0		38	30	254	8.47	93.6	59.7
	13	31	235	7.58	96.7	55.3		39	28	264	9.43	87.3	62.1
November	14	19	111	5.84	59.3	26.1	May	40	27	306	11.33	84.2	72.0
	15	23	202	8.78	71.7	47.5		41	22	246	11.18	68.6	57.9
	16	21	164	7.81	65.5	38.6		42	25	232	9.28	78.0	54.6
	17	17	112	6.59	53.0	26.3		43	19	188	9.89	59.3	44.2
December	18	16	141	8.81	49.9	33.2	June	44	19	220	11.58	59.3	51.7
	19	17	113	6.65	53.0	26.6		45	18	182	10.11	56.1	42.8
	20	14	134	9.57	43.7	31.5		46	20	188	9.40	62.4	44.2
	21	13	129	9.92	40.6	30.3		47	21	262	12.48	65.5	61.6
January	22	25	253	10.12	78.0	59.5	July	48	23	237	10.30	71.7	55.7
	23	30	344	11.47	93.6	80.9		49	22	272	12.36	68.6	64.0
	24	36	453	12.58	112.3	106.5		50	29	354	12.21	90.5	83.2
	25	44	580	13.18	137.3	136.4		51	30	349	11.63	93.6	82.1
	26	45	649	14.42	140.4	152.6		52	29	328	11.31	90.5	77.1
							Total			22,112			
							Average		32.06	425.23	13.26	100.0	100.0

PART PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	100	$1,159	$11.59	118.7	112.3	February	27	111	$1,590	$14.32	131.8	154.0
	2	101	1,295	12.82	119.9	125.4		28	101	1,501	14.83	119.9	145.4
	3	108	1,373	12.71	128.2	133.0		29	108	1,690	15.65	128.2	163.7
	4	107	1,441	13.47	127.0	139.6		30	108	1,805	16.71	128.2	174.8
September	5	104	1,488	14.31	123.5	144.1	March	31	104	1,645	15.82	123.5	159.3
	6	108	1,058	9.80	128.2	102.5		32	105	1,576	15.01	124.7	152.6
	7	105	1,503	14.31	124.7	145.6		33	98	1,553	15.85	116.3	150.4
	8	106	1,354	12.77	125.8	131.1		34	97	1,314	13.55	115.2	127.3
October	9	102	1,300	12.75	121.1	125.9	April	35	90	1,121	12.46	106.8	108.6
	10	103	1,527	14.83	122.3	147.9		36	85	950	11.18	100.9	92.0
	11	102	1,529	14.99	121.1	148.1		37	82	871	10.62	97.4	84.4
	12	95	1,368	14.40	112.8	132.5		38	68	559	8.22	80.7	54.1
	13	91	1,013	11.13	108.0	98.1		39	72	577	8.01	85.5	55.9
November	14	71	737	10.38	84.3	71.4	May	40	67	618	9.22	79.5	59.9
	15	71	776	10.93	84.3	75.2		41	64	607	9.48	76.0	58.8
	16	65	627	9.65	77.2	60.7		42	59	573	9.71	70.0	55.5
	17	60	480	8.00	71.2	46.5		43	50	450	9.00	59.4	43.6
December	18	56	411	7.34	66.5	39.8	June	44	46	505	10.98	54.6	48.9
	19	53	443	8.36	62.9	42.9		45	56	514	9.18	66.5	49.8
	20	52	442	8.50	61.7	42.8		46	69	853	12.36	81.9	82.6
	21	59	477	8.08	70.0	46.2		47	80	938	11.73	95.0	90.9
January	22	63	608	9.65	74.8	58.9	July	48	75	863	11.51	89.0	83.6
	23	84	918	10.93	99.7	88.9		49	81	949	11.72	96.2	91.9
	24	87	1,030	11.84	103.3	99.8		50	84	1,070	12.74	99.7	101.6
	25	96	1,233	12.84	114.0	119.4		51	81	1,019	12.58	96.2	98.7
	26	110	1,448	13.16	130.6	140.2		52	80	939	11.74	95.0	90.9
							Total			53,688			
							Average		84.23	1,032	12.26	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

BASTERS (MALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	10	$147	$14.70	124.7	107.3	February	27	10	$162	$16.20	124.7	118.2
	2	9	156	17.33	112.2	113.9		28	9	157	17.44	112.2	114.6
	3	10	175	17.50	124.7	127.7		29	8	160	20.00	99.8	116.8
	4	11	158	14.36	137.2	115.3		30	9	182	20.22	112.2	132.8
September	5	10	184	18.40	124.7	134.3	March	31	9	186	20.67	112.2	135.8
	6	9	134	14.89	112.2	97.8		32	9	187	20.78	112.2	136.5
	7	9	173	19.22	112.2	126.3		33	9	189	21.00	112.2	138.0
	8	9	169	18.78	112.2	123.4		34	9	177	19.67	112.2	129.2
October	9	9	174	19.33	112.2	127.0	April	35	9	188	20.89	112.2	137.2
	10	8	163	20.38	99.8	119.0		36	9	146	16.22	112.2	106.6
	11	9	158	17.56	112.2	115.3		37	8	144	18.00	99.8	105.1
	12	8	141	17.63	99.8	102.9		38	7	112	16.00	87.3	81.8
November	13	7	126	18.00	87.3	92.0	May	39	7	122	17.43	87.3	89.1
	14	8	122	15.25	99.8	89.1		40	9	151	16.78	112.2	110.2
	15	8	112	14.00	99.8	81.8		41	8	143	17.88	99.8	104.4
	16	7	90	12.86	87.3	65.7		42	6	84	14.00	74.8	61.3
December	17	6	83	13.83	74.8	60.6	June	43	6	101	16.83	74.8	73.7
	18	5	74	14.80	62.4	54.0		44	6	84	14.00	74.8	61.3
	19	5	82	16.40	62.4	59.9		45	6	74	12.33	74.8	54.0
	20	7	110	15.71	87.3	80.3		46	6	99	16.50	74.8	72.3
	21	6	103	17.17	74.8	75.2		47	5	84	16.80	62.4	61.3
January	22	8	133	16.63	99.8	97.1	July	48	5	78	15.60	62.4	56.9
	23	9	149	16.56	112.2	108.8		49	7	106	15.14	87.3	77.4
	24	8	122	15.25	99.8	89.1		50	9	148	16.44	112.2	108.0
	25	9	155	17.22	112.2	113.1		51	9	148	16.44	112.2	108.0
	26	10	171	17.10	124.7	124.8		52	9	148	16.44	112.2	108.0
							Total			7,124			
							Average		8.02	137.00	17.08	100.0	100.0

FINISHERS (MALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	9	$134	$14.89	98.3	99.7	February	27	8	$138	$17.25	87.4	102.7
	2	9	133	14.78	98.3	99.0		28	9	143	15.89	98.3	106.4
	3	10	142	14.20	109.2	105.7		29	9	160	17.78	98.3	119.1
	4	10	143	14.30	109.2	106.4		30	11	181	16.45	120.2	134.7
September	5	10	155	15.50	109.2	115.4	March	31	11	190	17.27	120.2	141.4
	6	9	109	12.11	98.3	81.1		32	11	194	17.64	120.2	144.4
	7	10	156	15.60	109.2	116.1		33	11	192	17.45	120.2	142.9
	8	10	135	13.50	109.2	100.5		34	11	180	16.36	120.2	134.0
October	9	9	128	14.22	98.3	95.3	April	35	12	197	16.42	131.1	146.6
	10	11	154	14.00	120.2	114.6		36	11	165	15.00	120.2	122.8
	11	10	144	14.40	109.2	107.2		37	9	129	14.33	98.3	96.0
	12	8	137	17.13	87.4	102.0		38	9	108	12.00	98.3	80.4
November	13	9	137	15.22	98.3	102.0	May	39	9	108	12.00	98.3	80.4
	14	9	121	13.44	98.3	90.1		40	9	125	13.89	98.3	93.0
	15	8	104	13.00	87.4	77.4		41	9	119	13.22	98.3	88.6
	16	8	103	12.88	87.4	76.7		42	8	116	14.50	87.4	86.3
December	17	10	126	12.60	109.2	93.8	June	43	7	87	12.43	76.5	64.7
	18	8	107	13.38	87.4	79.6		44	6	90	15.00	65.5	67.0
	19	8	106	13.25	87.4	78.9		45	7	89	12.71	76.5	66.2
	20	9	116	12.89	98.3	86.3		46	6	92	15.33	65.5	68.5
	21	9	126	14.00	98.3	93.8		47	8	119	14.88	87.4	88.6
January	22	10	133	13.30	109.2	99.0	July	48	8	119	14.88	87.4	88.6
	23	10	154	15.40	109.2	114.6		49	10	133	13.30	109.2	99.0
	24	10	148	14.80	109.2	110.1		50	10	139	13.90	109.2	103.4
	25	8	125	15.63	87.4	93.0		51	9	133	14.78	98.3	99.0
	26	8	131	16.38	87.4	97.5		52	9	134	14.89	98.3	99.7
							Total			6,987			
							Average		9.15	134.37	14.68	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SAMPLE FINISHERS (MALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	9	$161	$17.89	121.2	115.0	February	27	6	$118	$19.67	80.8	84.3
	2	9	161	17.89	121.2	115.0		28	6	137	22.83	80.8	97.8
	3	8	146	18.25	107.8	104.3		29	6	148	24.67	80.8	105.7
	4	8	146	18.25	107.8	104.3		30	6	147	24.50	80.8	105.0
September	5	8	162	20.25	107.8	115.7	March	31	6	152	25.33	80.8	108.6
	6	8	123	15.38	107.8	87.8		32	6	136	22.67	80.8	97.1
	7	8	174	21.75	107.8	124.3		33	6	144	24.00	80.8	102.8
	8	8	157	19.63	107.8	112.1		34	6	142	23.67	80.8	101.4
	9	8	155	19.38	107.8	110.7		35	6	145	24.17	80.8	103.6
October	10	8	175	21.88	107.8	125.0	April	36	6	141	23.50	80.8	100.7
	11	6	142	23.67	80.8	101.4		37	6	134	22.33	80.8	95.7
	12	6	143	23.83	80.8	102.1		38	5	93	18.60	67.4	66.4
	13	6	123	20.50	80.8	87.8		39	6	97	16.17	80.8	69.3
	14	6	110	18.33	80.8	78.6		40	6	107	17.83	80.8	76.4
November	15	8	138	17.25	107.8	98.6	May	41	10	147	14.70	134.7	105.0
	16	9	158	17.56	121.2	112.8		42	10	171	17.10	134.7	122.1
	17	8	145	18.13	107.8	103.6		43	10	174	17.40	134.7	124.3
	18	9	148	16.44	121.2	105.7		44	10	182	18.20	134.7	130.0
December	19	8	131	16.38	107.8	93.6	June	45	9	152	16.89	121.2	108.6
	20	9	147	16.33	121.2	105.0		46	8	135	16.88	107.8	96.4
	21	9	160	17.78	121.2	114.3		47	8	134	16.75	107.8	95.7
	22	8	145	18.13	107.8	103.6		48	8	132	16.50	107.8	94.3
January	23	8	129	16.13	107.8	92.1	July	49	7	124	17.71	94.3	88.6
	24	7	119	17.00	94.3	85.0		50	7	124	17.71	94.3	88.6
	25	7	116	16.57	94.3	82.8		51	7	113	16.14	94.3	80.7
	26	6	116	19.33	80.8	82.8		52	7	122	17.43	94.3	87.1
							Total			7,281			
							Average		7.42	140.02	18.86	100.0	100.0

SKIRT FINISHERS (MALE).

August	1						February	27	2	$23	$11.50	212.2	241.1
	2							28	2	21	10.50	212.2	220.2
	3	1	$12	$12.00	106.1	125.8		29	3	43	14.33	318.4	450.8
	4	1	13	13.00	106.1	136.3		30	2	25	12.50	212.2	262.1
September	5	1	12	12.00	106.1	125.8	March	31	2	22	11.00	212.2	230.6
	6	1	7	7.00	106.1	73.4		32	2	20	10.00	212.2	209.7
	7	2	13	6.50	212.2	136.3		33	2	24	12.00	212.2	251.6
	8	2	16	8.00	212.2	167.7		34	2	21	10.50	212.2	220.2
	9	2	17	8.50	212.2	178.2		35	2	26	13.00	212.2	272.6
October	10	2	14	7.00	212.2	146.8	April	36	2	22	11.00	212.2	230.6
	11	2	9	4.50	212.2	94.4		37	1	12	12.00	106.1	125.8
	12							38	1	10	10.00	106.1	104.8
	13							39	1	12	12.00	106.1	125.8
	14							40	1	11	11.00	106.1	115.3
November	15						May	41	1	7	7.00	106.1	73.4
	16							42	1	11	11.00	106.1	115.3
	17							43	1	8	8.00	106.1	83.9
	18							44	1	6	6.00	106.1	62.9
December	19						June	45	1	10	10.00	106.1	104.8
	20							46	1	12	12.00	106.1	125.8
	21							47	1	11	11.00	106.1	115.3
	22							48					
	23							49					
January	24	1	6	6.00	106.1	62.9	July	50					
	25	1	10	10.00	106.1	104.8		51					
	26	1	10	10.00	106.1	104.8		52					
							Total			496			
							Average		0.94	9.54	10.12	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

BASTERS (FEMALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	17	$204	$12.00	86.4	82.4	February	27	24	$352	$14.67	122.0	142.3
	2	19	241	12.68	96.6	97.4		28	24	342	14.25	122.0	138.2
	3	22	299	13.59	111.8	120.8		29	26	378	14.54	132.2	152.8
	4	23	323	14.04	116.9	130.5		30	24	394	16.42	122.0	159.2
September	5	24	334	13.92	122.0	135.0	March	31	25	394	15.76	127.1	159.2
	6	23	208	9.04	116.9	84.1		32	22	350	15.91	111.8	141.5
	7	24	330	13.75	122.0	133.4		33	24	394	16.42	122.0	159.2
	8	25	351	14.04	127.1	141.9		34	24	333	13.88	122.0	134.6
	9	25	340	13.60	127.1	137.4		35	21	291	13.86	106.7	117.6
October	10	26	341	13.12	132.2	137.8	April	36	19	247	13.00	96.6	99.8
	11	24	310	12.92	122.0	125.3		37	18	218	12.11	91.5	88.1
	12	22	264	12.00	111.8	106.7		38	15	169	11.27	76.2	68.3
	13	19	159	8.37	96.6	64.3		39	17	170	10.00	86.4	68.7
November	14	13	108	8.31	66.1	43.6	May	40	17	186	10.94	86.4	75.2
	15	18	176	9.78	91.5	71.1		41	16	210	13.13	81.3	84.9
	16	15	179	11.93	76.2	72.3		42	17	189	11.12	86.4	76.4
	17	15	144	9.60	76.2	58.2		43	12	110	9.17	61.0	44.5
December	18	16	145	9.06	81.3	58.6	June	44	15	162	10.80	76.2	65.5
	19	18	152	8.44	91.5	61.4		45	16	161	10.06	81.3	65.1
	20	16	129	8.06	81.3	52.1		46	19	205	10.79	96.6	82.9
	21	17	172	10.12	86.4	69.5		47	18	255	14.17	91.5	103.1
January	22	19	218	11.47	96.6	88.1	July	48	16	188	11.75	81.3	76.0
	23	19	249	13.11	96.6	100.6		49	17	218	12.82	86.4	88.1
	24	20	268	13.40	101.7	108.3		50	18	230	12.78	91.5	93.0
	25	21	272	12.95	106.7	109.9		51	17	217	12.76	86.4	87.7
	26	22	322	14.64	111.8	130.1		52	20	265	13.25	101.7	107.1
							Total			12,866			
							Average		19.67	247.42	12.58	100.0	100.0

FINISHERS (FEMALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	25	$252	$10.08	85.3	78.8	February	27	34	$433	$12.73	116.0	135.5
	2	23	271	11.78	78.5	84.8		28	35	424	12.11	119.4	132.7
	3	28	295	10.54	95.5	92.3		29	35	424	12.11	119.4	132.7
	4	27	314	11.63	92.1	98.2		30	36	440	12.22	122.8	137.7
September	5	27	324	12.00	92.1	101.4	March	31	34	426	12.53	116.0	133.3
	6	26	223	8.58	88.7	69.8		32	35	449	12.83	119.4	140.5
	7	28	326	11.64	95.5	102.0		33	34	452	13.29	116.0	141.4
	8	27	330	12.22	92.1	103.2		34	31	375	12.10	105.8	117.3
	9	27	341	12.63	92.1	106.7		35	32	365	11.41	109.2	114.2
October	10	31	361	11.65	105.8	112.9	April	36	35	389	11.11	119.4	121.7
	11	32	364	11.38	109.2	113.9		37	34	370	10.88	116.0	115.8
	12	29	356	12.28	99.0	111.4		38	33	324	9.82	112.6	101.4
	13	26	254	9.77	88.7	79.5		39	34	354	10.41	116.0	110.8
November	14	21	192	9.14	71.7	60.1	May	40	34	367	10.79	116.0	114.8
	15	22	202	9.18	75.1	63.2		41	31	313	10.10	105.8	97.9
	16	26	258	9.92	88.7	80.7		42	32	311	9.72	109.2	97.3
	17	26	229	8.81	88.7	71.6		43	25	256	10.24	85.3	80.1
December	18	25	249	9.96	85.3	77.9	June	44	26	258	9.92	88.7	80.7
	19	26	235	9.04	88.7	73.5		45	23	224	9.74	78.5	70.1
	20	24	233	9.71	81.9	72.9		46	26	269	10.35	88.7	84.2
	21	26	249	9.58	88.7	77.9		47	26	297	11.42	88.7	92.9
January	22	24	230	9.58	81.9	72.0	July	48	29	298	10.28	99.0	93.1
	23	31	282	9.10	105.8	88.2		49	25	292	11.68	85.3	91.4
	24	31	321	10.35	105.8	100.4		50	33	340	10.30	112.6	106.4
	25	34	351	10.32	116.0	109.8		51	34	367	10.79	116.0	114.8
	26	33	407	12.33	112.6	127.3		52	33	355	10.76	112.6	111.1
							Total			16,621			
							Average		29.31	319.63	10.91	100.0	100.0

TABLE 4.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Concluded.

SAMPLE FINISHERS (FEMALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	10	$114	$11.40	81.5	79.7	February	27	13	$163	$12.54	106.0	114.0
	2	10	100	10.00	81.5	69.9		28	12	161	13.42	97.8	112.6
	3	10	101	10.10	81.5	70.6		29	10	140	14.00	81.5	97.9
	4	10	98	9.80	81.5	68.5		30	10	140	14.00	81.5	97.9
	5	9	106	11.78	73.4	74.1		31	10	134	13.40	81.5	93.7
September	6	9	102	11.33	73.4	71.3	March	32	10	133	13.30	81.5	93.0
	7	10	125	12.50	81.5	87.4		33	11	136	12.36	89.7	95.1
	8	9	119	13.22	73.4	83.2		34	10	126	12.60	81.5	88.1
	9	9	116	12.89	73.4	81.1		35	12	159	13.25	97.8	111.2
	10	9	122	13.56	73.4	85.3	April	36	12	157	13.08	97.8	110.0
October	11	9	116	12.89	73.4	81.1		37	12	146	12.17	97.8	102.1
	12	10	137	13.70	81.5	95.8		38	12	101	8.42	97.8	70.6
	13	12	141	11.75	97.8	98.6		39	16	171	10.69	130.4	119.6
	14	12	141	11.75	97.8	98.6		40	16	193	12.06	130.4	135.0
November	15	10	121	12.10	81.5	84.6	May	41	15	162	10.80	122.3	113.3
	16	13	146	11.23	106.0	102.1		42	14	148	10.57	114.1	103.5
	17	12	146	12.17	97.8	102.1		43	14	137	9.79	114.1	95.8
	18	13	155	11.92	106.0	108.4		44	15	176	11.73	122.3	123.1
December	19	14	157	11.21	114.1	109.8	June	45	16	146	9.13	130.4	102.1
	20	12	141	11.75	97.8	98.6		46	15	145	9.67	122.3	101.4
	21	12	133	11.08	97.8	93.0		47	16	186	11.63	130.4	130.1
	22	15	169	11.27	122.3	118.2		48	16	177	11.06	130.4	123.8
	23	15	164	10.93	122.3	114.7		49	14	167	11.93	114.1	116.8
January	24	16	159	9.94	130.4	111.2	July	50	15	161	10.73	122.3	112.6
	25	13	169	13.00	106.0	118.2		51	12	144	12.00	97.8	100.7
	26	13	162	12.46	106.0	113.3		52	14	167	11.93	114.1	116.8
							Total			7,436			
							Average		12.27	143.00	11.66	100.0	100.0

SKIRT FINISHERS (FEMALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	52	$424	$8.15	85.4	72.1	February	27	70	$764	$10.66	114.9	119.7
	2	58	524	9.03	95.2	89.1		28	66	711	10.77	108.4	120.8
	3	56	549	9.80	91.9	93.3		29	67	795	11.87	110.0	135.1
	4	57	525	9.21	93.6	89.2		30	71	853	12.01	116.6	145.0
	5	58	616	10.62	95.2	104.7		31	75	915	12.20	123.1	155.5
September	6	57	391	6.86	93.6	66.5	March	32	81	963	11.89	133.0	163.7
	7	58	623	10.74	95.2	105.9		33	88	1,062	12.07	144.5	180.5
	8	57	592	10.39	93.6	100.6		34	85	953	12.11	139.6	162.0
	9	58	591	10.19	95.2	100.4		35	85	883	10.39	139.6	150.1
	10	57	528	9.26	93.6	89.7		36	86	914	10.63	141.2	155.3
October	11	54	514	9.52	88.7	87.4	April	37	83	858	10.34	136.3	145.8
	12	53	469	8.85	87.0	79.7		38	75	677	9.03	123.1	115.1
	13	42	253	6.02	69.0	43.0		39	76	654	8.61	124.8	111.2
	14	35	228	6.51	57.5	38.8		40	81	804	9.93	133.0	136.6
November	15	40	293	7.33	65.7	49.8	May	41	77	774	10.05	126.4	131.6
	16	33	243	7.36	54.2	41.3		42	69	656	9.51	113.3	111.5
	17	33	208	6.30	54.2	35.4		43	62	590	9.52	101.8	100.3
	18	34	227	6.68	55.8	38.6		44	60	608	10.13	98.5	103.3
December	19	33	201	6.09	54.2	34.2	June	45	61	587	9.62	100.2	99.8
	20	36	258	7.17	59.1	43.9		46	63	601	9.54	103.4	102.1
	21	36	304	8.44	59.1	51.7		47	75	721	9.61	123.1	122.5
	22	42	303	7.21	69.0	51.5		48	75	711	9.48	123.1	120.8
	23	52	415	7.98	85.4	70.5		49	73	703	9.63	119.9	119.5
January	24	55	508	9.24	90.3	86.3	July	50	69	668	9.68	113.3	113.5
	25	64	607	9.48	105.1	103.2		51	61	585	9.59	100.2	99.4
	26	64	672	10.50	105.1	114.2		52	59	579	9.81	96.9	98.4
							Total			30,595			
							Average		60.90	588.36	9.66	100.0	100.0

The first occupation presented is that of cutters, and Table 4 shows this to be a very irregular occupation. The earnings in the busiest week are 299 per cent in excess of those in the dullest week, while the largest number of employees in any week is 207 per cent greater than the minimum. It will be noted that these percentages are much greater than those for all week workers combined and are even greater than the range of fluctuation in the total pay roll, including pieceworkers.[1]

The skirt cutters appear to have a busy season in the summer months, corresponding approximately to the dull season in the cloak, suit, and skirt industry taken as a whole. This same tendency appears in the section of the table showing the seasonal distribution of employment and earnings for skirt finishers. On the other hand, the figures for both upper and under skirt pressers seem to indicate that this part of the industry conforms fairly closely to the industry as a whole, though its busy spring season extends a little further into the summer. It is possible, therefore, that the apparent variation of the seasonal employment of the skirt workers may be due to changes in method of employment. The number of skirt cutters, for example, is small, and if only a few regular cutters during the dull season were replaced by or became skirt cutters, who earn a smaller rate of pay, this would account for the apparent conditions in this occupation. The large number of skirt finishers in the summer weeks might be accounted for by a change from piecework to week work during that season.

In order to ascertain the real seasonal variations in the employment and earnings in this branch of the industry, a complete separation of skirt workers engaged as pieceworkers and as week workers would be necessary. As it was impossible, however, to determine the number of pieceworkers in the industry as a whole, it was manifestly out of the question to undertake such a separation. The figures obtained from 10 Boston shops and from 13 independent or nonassociation shops indicate no definite tendencies, owing to the small number of employees, and consequently throw no light on the question, which must be left unsettled until an investigation of the skirt houses in New York, comparable with this study in scope and method, has been made.

The figures for canvas cutters show much the same tendencies as those for the regular cutters. One feature of this occupation is highly significant, namely, the average weekly earnings. The scale for canvas cutters is only $12 a week, but their earnings range from $13.28 to $19.20 and average $16.41 for the entire year. This remarkable showing may to some extent be regarded as confirmation of the claim of the cutters that these employees are not real learners or apprentices, but are in many cases underscale cutters.

[1] See Table 2.

The table shows that the jacket upper pressers have approximately the same busy and dull seasons as the cutters. It is worthy of note, however, that the number of employees does not vary so greatly as in some of the other occupations. The largest number in any one week is less than 70 per cent in excess of the least number, as compared with 207 per cent in the case of the cutters. On the other hand, their weekly earnings in the busiest week are 212 per cent greater than they are in the dullest week. This seems to show that employers are inclined to give this class of workers more permanent employment than other classes, or at least to keep in touch with them during the dull seasons by giving them some work to do even though they are not employed for full time. This point will be discussed more at length in a subsequent part of this report.

The jacket under pressers are apparently not employed so regularly as the upper pressers. The greatest number is 156 per cent above the least number, and the earnings in the busiest week exceed those of the dullest week by 494 per cent. The low average wages of all classes of pressers indicate a distribution of work during the slack seasons among a considerable number of employees retained on some system of part-time employment rather than the employment of a smaller number on a more nearly full-time basis, as is evidently the case with the cutters.

The skirt upper pressers appear to have approximately the same busy and dull seasons as the jacket upper pressers, and are employed about as regularly.

The earnings of the skirt under pressers are extremely irregular, as is also the number employed at different seasons. The largest number is 262 per cent greater than the smallest number and the earnings of the busiest week exceed those of the dullest week by 628 per cent. The numbers involved are so small, however, as to render it unsafe to base any conclusions on this table.

The fluctuations in the employment and earnings of the part pressers correspond very closely to those of the jacket under pressers. The average weekly earnings for the year ($12.26) are substantially below the rate ($13) fixed by the protocol and indicate that the classification is more strictly adhered to than that among the cutters, where the canvas cutters had average earnings much above the protocol rate.

The number of male basters and finishers of various kinds is so small that no conclusions based upon the following tables seem worth while. It is apparent that so far as week workers are concerned these occupations are primarily for female employees. The scale of pay was evidently fixed for women workers rather than for men, as the men in practically every case show average earnings much above it.

The female basters and finishers are much more numerous than the male employees in these occupations. The same seasonal fluctuations

in earnings and in numbers employed are found here, as elsewhere in the industry, except in the case of the skirt finishers—already alluded to in connection with skirt cutters—and of the sample finishers. The latter, like the sample makers, who have not been tabulated, have their busy seasons during the dull seasons of the other occupations.

Tables 5 and 6, which follow, bring into comparison for the principal occupations the fluctuations in amount of employment and in earnings from week to week during the year, as shown by the pay rolls for the 90 shops.

TABLE 5.—COMPARISON OF THE FLUCTUATIONS IN AMOUNT OF EMPLOYMENT IN THE PRINCIPAL OCCUPATIONS, AS SHOWN BY THE PERCENTAGE OF THE AVERAGE NUMBER OF EMPLOYEES IN EACH WEEK IN 90 ASSOCIATION SHOPS, AUGUST, 1912, TO JULY, 1913.

Week No.	Per cent of average number of employees in each week.									
	Cutters.	Canvas cutters.	Jacket upper pressers.	Jacket under pressers.	Skirt upper pressers.	Skirt under pressers.	Part pressers.	Basters, female.	Finishers, female.	Skirt finishers, female.
1	111.4	112.8	97.6	103.3	103.8	115.4	118.7	86.4	85.3	85.4
2	123.1	115.1	103.3	112.2	103.8	127.9	119.9	96.6	78.5	95.2
3	131.6	122.1	112.3	118.4	111.4	140.4	128.2	111.8	95.5	91.9
4	135.7	138.2	115.2	124.2	116.9	146.6	127.0	116.9	92.1	93.6
5	133.3	129.0	116.5	126.5	114.7	146.6	123.5	122.0	92.1	95.2
6	127.5	122.1	116.0	124.2	113.6	140.4	128.2	116.9	88.7	93.6
7	126.9	126.7	120.6	125.9	108.1	140.4	124.7	122.0	95.5	95.2
8	127.2	124.4	118.0	125.9	113.6	131.0	125.8	127.1	92.1	93.6
9	132.4	117.4	115.4	121.8	111.4	121.7	121.1	127.1	92.1	95.2
10	134.2	117.4	114.7	121.1	108.1	115.4	122.3	132.2	105.8	93.6
11	125.4	115.1	117.8	120.7	107.0	124.8	121.1	122.0	109.2	88.7
12	105.0	110.5	115.2	116.6	102.7	118.5	112.8	111.8	99.0	87.0
13	78.1	82.9	108.7	104.7	95.0	96.7	108.0	96.6	88.7	69.0
14	60 5	76.0	93.2	82.2	78.6	59.3	84.3	66.1	71.7	57.5
15	60.2	69.1	89.9	79.8	78.6	71.7	84.3	91.5	75.1	65.7
16	58.2	62.2	85.5	77.1	80.8	65.5	77.2	76.2	88.7	54.2
17	49.4	64.5	77.7	65.8	72.1	53.0	71.2	76.2	88.7	54.2
18	49.7	62.2	72.1	56.3	72.1	49.9	66.5	81.3	85.3	55.8
19	54.7	64.5	72.8	53.9	73.2	53.0	62.9	91.5	88.7	54.2
20	66.4	69.1	72.3	57.3	76.5	43.7	61.7	81.3	81.9	59.1
21	68.4	71.4	72.3	61.1	75.4	40.6	70.0	86.4	88.7	59.1
22	73.4	85.2	79.3	73.3	80.8	78.0	74.8	96.6	81.9	69.0
23	90.9	108.2	92.5	90.7	95.0	93.6	99.7	96.9	105.8	85.4
24	112.9	122.1	99.7	103.3	98.3	112.3	103.3	101.7	105.8	90.3
25	129.2	124.4	103.3	110.8	102.7	137.3	114.0	106.7	116.0	105.1
26	140.1	124.4	110.3	120.1	102.7	140.4	130.6	111.8	112.6	105.1
27	143.3	131.3	111.1	125.9	102.7	137.3	131.8	122.0	116.0	114.9
28	147.4	129.0	111.6	126.5	102.7	143.5	119.9	122.0	119.4	108.4
29	151.5	124.4	114.4	127.9	111.4	137.3	128.2	132.2	119.4	110.0
30	148.2	126.7	115.4	133.4	115.8	137.3	128.2	122.0	122.8	116.6
31	143.3	124.4	118.5	138.1	116.9	131.0	123.5	127.1	116.0	123.1
32	134.8	119.8	121.6	138.1	120.1	137.0	124.7	111.8	119.4	133.0
33	134.2	117.4	120.1	127.6	123.4	127.9	116.3	122.0	116.0	144.5
34	125.1	117.4	114.9	124.5	120.1	127.9	115.2	122.0	105.8	139.6
35	102.6	112.8	112.9	118.4	111.4	118.5	106.8	106.7	109.2	139.6
36	92.7	105.9	107.4	100.3	109.2	109.2	100.9	96.6	119.4	141.2
37	81.9	89.8	104.3	90.4	108.1	99.8	97.4	91.5	116.0	136.3
38	72.5	71.4	97.9	83.9	105.9	93.6	80.7	76.2	112.6	123.1
39	65.5	64.5	95.6	82.9	104.9	87.3	85.5	86.4	116.0	124.8
40	65.5	73.7	92.5	80.8	103.8	84.2	79.5	86.4	116.0	133.0
41	59.4	73.7	89.9	71.6	101.6	68.6	76.0	81.3	105.8	126.4
42	55.3	62.2	86.8	67.9	99.4	78.0	70.0	86.4	109.2	113.3
43	49.4	53.0	73.3	59.7	91.7	59.3	59.4	61.0	85.3	101.8
44	59.9	59.9	73.9	62.4	86.3	59.3	54.6	76.2	88.7	98.5
45	71.0	80.6	75.4	65.5	86.3	56.1	66.5	81.3	78.5	100.2
46	86.0	87.5	86.0	84.2	90.7	62.4	81.9	96.6	88.7	103.4
47	88.6	101.3	92.2	98.6	93.9	65.5	95.0	91.5	88.7	123.1
48	83.0	96.7	88.3	93.5	91.7	71.7	89.0	81.3	99.0	123.1
49	95.6	101.3	94.8	101.3	97.2	68.6	96.2	86.4	85.3	119.9
50	105.8	110.5	101.0	102.3	104.9	90.5	99.7	91.5	112.6	113.3
51	113.7	115.1	105.4	109.8	101.6	93.6	96.2	86.4	116.0	100.2
52	118.1	112.8	102.5	107.4	101.6	90.5	95.0	101.7	112.6	96.9

TABLE 6.—COMPARISON OF THE FLUCTUATIONS IN WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, AS SHOWN BY THE PERCENTAGE OF THE AVERAGE WEEKLY PAY ROLL IN EACH WEEK IN 90 ASSOCIATION SHOPS. AUGUST, 1912, TO JULY, 1913.

Week No.	Per cent of average weekly pay roll in each week.									
	Cutters.	Canvas cutters.	Jacket upper pressers.	Jacket under pressers.	Skirt upper pressers.	Skirt under pressers.	Part pressers.	Basters, female.	Finishers, female.	Skirt finishers, female.
1	110.6	109.5	98.8	102.5	105.0	113.4	112.3	82.4	78.8	72.1
2	129.2	121.5	112.6	120.3	110.3	133.1	125.4	97.4	84.8	89.1
3	140.7	134.3	125.4	135.8	123.9	159.2	133.0	120.8	92.3	93.3
4	145.1	145.0	137.0	149.1	130.3	172.6	139.6	130.5	98.2	89.2
5	142.1	139.2	139.5	154.7	135.3	180.4	144.1	135.0	101.4	104.7
6	103.9	98.8	99.9	106.5	96.6	125.6	102.5	84.1	69.8	66.5
7	124.1	124.6	139.1	147.4	124.6	165.1	145.6	133.4	102.0	105.9
8	131.3	127.0	132.1	145.1	128.2	151.5	131.1	141.9	103.2	100.6
9	137.8	126.6	119.7	131.3	119.8	143.9	125.9	137.4	106.7	100.4
10	142.6	135.3	139.2	151.5	121.0	141.1	147.9	137.8	112.9	89.7
11	131.4	125.5	140.8	150.4	118.8	141.3	148.1	125.3	113.9	87.4
12	105.7	113.9	138.0	134.9	100.3	119.0	132.5	106.7	111.4	79.7
13	75.2	84.2	111.5	96.9	76.8	55.3	98.1	64.3	79.5	43.0
14	55.3	74.9	77.5	64.1	51.4	26.1	71.4	43.6	60.1	38.8
15	56.7	68.5	73.8	53.6	60.8	47.5	75.2	71.1	63.2	49.8
16	53.7	59.2	70.6	54.0	59.8	38.6	60.7	72.3	80.7	41.3
17	43.1	59.1	58.6	40.7	50.3	26.3	46.5	58.2	71.6	35.4
18	42.6	55.6	51.9	32.2	50.6	33.2	39.8	58.6	77.9	38.6
19	49.1	58.5	49.4	29.8	47.8	26.6	42.9	61.4	73.5	34.2
20	61.0	62.2	54.5	34.4	57.6	31.5	42.8	52.1	73.0	43.9
21	64.2	66.9	51.7	40.6	58.8	30.3	46.2	69.5	77.9	51.7
22	68.6	74.7	56.7	56.0	69.8	59.5	58.9	88.1	72.0	51.5
23	87.2	96.7	84.5	80.5	80.6	80.9	88.9	100.6	88.2	70.5
24	108.4	111.1	99.8	106.1	93.4	106.5	99.8	108.3	100.4	86.3
25	128.7	118.6	111.4	119.9	106.4	136.4	119.4	109.9	109.8	103.2
26	113.9	129.4	121.2	137.5	111.3	152.6	140.2	130.1	127.3	114.2
27	155.0	136.3	128.3	142.3	118.2	168.1	154.0	142.3	135.5	119.7
28	166.2	139.1	133.5	153.7	121.4	177.6	145.4	138.2	132.7	120.8
29	169.5	143.7	144.4	169.2	136.7	183.7	163.7	152.8	132.7	135.1
30	160.4	148.2	150.7	176.8	150.9	190.0	174.8	159.2	137.7	145.0
31	150.1	139.8	154.0	177.1	146.2	180.4	159.3	159.2	133.3	155.5
32	142.2	128.5	151.4	173.2	147.5	177.3	152.6	141.5	140.5	163.7
33	138.9	126.4	147.4	161.5	152.9	165.8	150.4	159.2	141.4	180.5
34	129.0	124.1	131.6	148.9	137.3	155.9	127.3	134.6	117.3	162.0
35	101.8	111.7	122.1	121.1	118.8	122.1	108.6	117.6	114.2	150.1
36	90.4	100.1	103.4	90.5	111.9	96.2	92.0	99.8	121.7	155.3
37	80.2	84.5	93.1	78.0	109.7	72.7	84.4	88.1	115.8	145.8
38	67.6	62.2	69.0	52.8	93.3	59.7	54.1	68.3	101.4	115.1
39	58.9	66.2	71.7	51.5	89.6	62.1	55.9	68.7	110.8	111.2
40	56.8	63.9	75.1	52.9	99.6	72.0	59.9	75.2	114.8	136.6
41	54.0	66.2	70.7	49.4	92.6	57.9	58.8	84.9	97.9	131.6
42	50.4	54.3	63.7	44.4	86.4	54.6	55.5	76.4	97.3	111.5
43	46.2	51.2	50.8	35.9	78.3	44.2	43.6	44.5	80.1	100.3
44	55.4	57.1	58.4	44.0	78.9	51.7	48.9	65.5	80.7	103.3
45	64.8	70.6	54.3	44.2	75.9	42.8	49.8	65.1	70.1	99.8
46	81.9	84.1	73.4	76.9	85.7	44.2	82.6	82.9	84.2	102.1
47	88.5	98.0	88.6	93.5	89.5	61.6	90.9	103.1	92.9	122.5
48	80.9	93.3	75.4	75.7	85.8	55.7	83.6	76.0	93.2	120.8
49	93.5	98.7	91.1	97.1	97.6	64.0	91.9	88.1	91.4	119.5
50	104.6	108.3	96.6	101.4	108.0	83.2	103.6	93.0	106.4	113.5
51	113.5	111.0	105.8	107.2	102.0	82.1	98.7	87.7	114.8	99.4
52	117.0	112.0	100.5	97.7	95.8	77.1	90.9	107.1	111.1	98.4

SEASONAL DEMAND FOR EMPLOYEES AND OPPORTUNITY FOR EARNINGS IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS.

The following table (Table 7) is derived from the data contained in Table 4. It shows how many employees in each occupation were required to man the 90 shops during the year. It will be apparent from an examination of the data for cutters in Table 4, for example, that the least number employed in any week in the year was 169,

in the last week of November and the last week of May. Evidently this number of cutters was required for the entire 52 weeks of the year. The next higher number was 170, in the first week of December. This number was not required for more than 50 weeks, since for two weeks only 169 were employed. Therefore 170 was the maximum number required for 50 to 52 weeks. A further examination of Table 4 shows that 187, or 17 more persons, were employed in the second week in December. These were needed for 49 weeks. The next higher number, 189, or two more, were employed in the third week in May, and so on. Thus 205, or 35 more, was the maximum number required for 45 to 49 weeks, 227, or 22 more, for 40 to 44 weeks, etc. The maximum number required at the busiest season was 518 in the third week in February.

Accordingly, this column shows the greatest number of cutters required in the nine busiest weeks of the seasons. The second line shows that in five other weeks of the year, with a decreased volume of work, the greatest number of cutters required in all of the 90 shops was 59 less than the greatest number required in the nine busiest weeks. Each succeeding line indicating weeks of gradually declining volumes of work shows a gradual decline in the number of cutters required, until, in the last line, headed "50 to 52 weeks," the number of cutters required shows the number of workers in the occupation that were necessary throughout the year.

The third figure column of Table 7 shows the number required for the full year (50 to 52 weeks) and the additional number required in each period as compared with the next longer period, and the fourth column, what percentage of the total number required at the peak of the busy season was added in each of the periods indicated. The last two columns give the possible earnings in each group on the basis of the average weekly earnings shown in Table 4 and on the basis of the rate of pay in this occupation prescribed by the protocol.

These earnings have practical significance only on the assumption that the 90 shops were actually operated as one shop, that 170 employees were given practically a full year's employment (50 to 52 weeks), that 35 additional employees were given an opportunity to work for 45 to 49 weeks, and so on. This is an assumption, however, which is quite contrary to the probabilities of the case in view of the fact that the 90 shops are not one shop, but independent and competing establishments, and that the mobility of labor in passing from shop to shop is by no means perfect. It will be shown, by definite figures, also, in a subsequent table, that these hypothetical opportunities for employment and annual earnings do not correspond closely to the facts of the case.

It is not safe to assume even that 169 individual cutters were afforded a full year's employment in this industry, for while this is the minimum requirement, it should be remembered that the fluctuations in the number of employees in the different shops are far from uniform. In other words, the low and high points do not necessarily coincide in the different establishments. If, therefore, the minimum number of employees in each shop were taken, irrespective of the week in which it occurred, and these minima were added together, the total would be considerably below 169.

It is safe, however, to conclude that 170 is the largest number of cutters who could have had a full year's employment in the 90 shops. The actual number constantly employed was considerably less than this, as is indicated by the figures in Table 8.

TABLE 7.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY COMBINED PAY-ROLL DATA FOR 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

CUTTERS.

[Possible earnings based on average weekly earnings of $24.36 and full weekly scale of $25.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	518	100.0	59	11.4	Up to $219	Up to $225
10 to 14 weeks	459	88.6	23	4.4	$244 to 341	$250 to 350
15 to 19 weeks	436	84.2	15	2.9	365 to 463	375 to 475
20 to 24 weeks	421	81.3	59	11.4	487 to 585	500 to 600
25 to 29 weeks	362	69.9	51	9.8	609 to 706	625 to 725
30 to 34 weeks	311	60.0	44	8.5	731 to 828	750 to 850
35 to 39 weeks	267	51.5	40	7.7	853 to 950	875 to 975
40 to 44 weeks	227	43.8	22	4.2	974 to 1,072	1,000 to 1,100
45 to 49 weeks	205	39.6	35	6.8	1,096 to 1,194	1,125 to 1,225
50 to 52 weeks	170	32.8	170	32.8	1,218 to 1,267	1,250 to 1,350
Total	.....	.....	518	100.0	.....	.....

SKIRT CUTTERS.

[Possible earnings based on average weekly earnings of $20.96 and full weekly scale of $21.]

Up to 9 weeks	25	100.0	6	24.0	Up to $189	Up to $189
10 to 14 weeks	19	76.0	2	8.0	$210 to 293	$210 to 294
15 to 19 weeks	17	68.0	.....	.....	314 to 398	315 to 399
20 to 24 weeks	17	68.0	2	8.0	419 to 503	420 to 504
25 to 29 weeks	15	60.0	.....	.....	524 to 608	525 to 609
30 to 34 weeks	15	60.0	1	4.0	629 to 713	630 to 714
35 to 39 weeks	14	56.0	2	8.0	734 to 817	735 to 819
40 to 44 weeks	12	48.0	1	4.0	838 to 922	840 to 924
45 to 49 weeks	11	44.0	1	4.0	943 to 1,027	945 to 1,029
50 to 52 weeks	10	40.0	10	40.0	1,048 to 1,090	1,050 to 1,092
Total	.....	.....	25	100.0	.....	.....

TABLE 7.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY COMBINED PAY-ROLL DATA FOR 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

CANVAS CUTTERS.

[Possible earnings based on average weekly earnings of $16.41 and full weekly scale of $12.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	60	100.0	6	10.0	Up to $148	Up to $108
10 to 14 weeks	54	90.0	2	3.3	$164 to 230	$120 to 168
15 to 19 weeks	52	86.7	2	3.3	246 to 312	180 to 228
20 to 24 weeks	50	83.3	1	1.7	328 to 394	240 to 288
25 to 29 weeks	49	81.7	5	8.3	410 to 476	300 to 348
30 to 34 weeks	44	73.3	7	11.7	492 to 558	360 to 408
35 to 39 weeks	37	61.7	5	8.3	574 to 640	420 to 468
40 to 44 weeks	32	53.3	4	6.7	656 to 722	480 to 528
45 to 49 weeks	28	46.7	1	1.7	738 to 804	540 to 588
50 to 52 weeks	27	45.0	27	45.0	821 to 853	600 to 624
Total			60	100.0		

JACKET UPPER PRESSERS.

[Possible earnings based on average weekly earnings of $17.65 and full weekly scale of $21.]

Up to 9 weeks	471	100.0	24	5.1	Up to $159	Up to $189
10 to 14 weeks	447	94.9	4	.8	$177 to 247	$210 to 294
15 to 19 weeks	443	94.1	16	3.4	265 to 335	315 to 399
20 to 24 weeks	427	90.7	27	5.7	353 to 424	420 to 504
25 to 29 weeks	400	84.9	21	4.5	441 to 512	525 to 609
30 to 34 weeks	379	80.5	21	4.5	530 to 600	630 to 714
35 to 39 weeks	358	76.0	16	3.4	618 to 688	735 to 819
40 to 44 weeks	342	72.6	41	8.7	706 to 777	840 to 924
45 to 49 weeks	301	63.9	21	4.5	794 to 865	945 to 1,029
50 to 52 weeks	280	59.4	280	59.4	883 to 918	1,050 to 1,092
Total			471	100.0		

JACKET UNDER PRESSERS.

[Possible earnings based on average weekly earnings of $14.39 and full weekly scale of $18.]

Up to 9 weeks	405	100.0	36	8.9	Up to $130	Up to $162
10 to 14 weeks	369	91.1	14	3.5	$144 to 201	$180 to 252
15 to 19 weeks	355	87.7	13	3.2	216 to 273	270 to 342
20 to 24 weeks	342	84.4	35	8.6	288 to 345	360 to 432
25 to 29 weeks	307	75.8	13	3.2	360 to 417	450 to 522
30 to 34 weeks	294	72.6	47	11.6	432 to 489	540 to 612
35 to 39 weeks	247	61.0	13	3.2	504 to 561	630 to 702
40 to 44 weeks	234	57.8	41	10.1	576 to 633	720 to 792
45 to 49 weeks	193	47.7	28	6.9	648 to 705	810 to 882
50 to 52 weeks	165	40.7	165	40.7	720 to 748	900 to 936
Total			405	100.0		

TABLE 7.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY COMBINED PAY-ROLL DATA FOR 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT UPPER PRESSERS.

[Possible earnings based on average weekly earnings of $16.39 and full weekly scale of $19.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	113	100.0	11	9.7	Up to $148	Up to $171
10 to 14 weeks	102	90.3	3	2.7	$164 to 229	$190 to 266
15 to 19 weeks	99	87.6	3	2.7	246 to 311	285 to 361
20 to 24 weeks	96	85.0	2	1.8	328 to 393	380 to 456
25 to 29 weeks	94	83.2	1	.9	410 to 475	475 to 551
30 to 34 weeks	93	82.3	4	3.5	492 to 557	570 to 646
35 to 39 weeks	89	78.8	5	4.4	574 to 639	665 to 741
40 to 44 weeks	84	74.3	10	8.8	656 to 721	760 to 836
45 to 49 weeks	74	65.5	7	6.2	738 to 803	855 to 931
50 to 52 weeks	67	59.3	67	59.3	820 to 852	950 to 988
Total			113	100.0		

SKIRT UNDER PRESSERS.

[Possible earnings based on average weekly earnings of $13.26 and full weekly scale of $15.]

Up to 9 weeks	47	100.0	3	6.4	Up to $119	Up to $135
10 to 14 weeks	44	93.6	3	6.4	$133 to 186	$150 to 210
15 to 19 weeks	41	87.2	3	6.4	199 to 252	225 to 285
20 to 24 weeks	38	80.9	3	6.4	265 to 318	300 to 360
25 to 29 weeks	35	74.5	5	10.6	332 to 385	375 to 435
30 to 34 weeks	30	63.8	5	10.6	398 to 451	450 to 510
35 to 39 weeks	25	53.2	3	6.4	464 to 517	525 to 585
40 to 44 weeks	22	46.8	3	6.4	530 to 583	600 to 660
45 to 49 weeks	19	40.4	3	6.4	597 to 650	675 to 735
50 to 52 weeks	16	34.0	16	34.0	663 to 690	750 to 780
Total			47	100.0		

PART PRESSERS.

[Possible earnings based on average weekly earnings of $12.26 and full weekly scale of $13.]

Up to 9 weeks	111	100.0	6	5.4	Up to $110	Up to $117
10 to 14 weeks	105	94.6	3	2.7	$123 to 172	$130 to 182
15 to 19 weeks	102	91.9	5	4.5	184 to 233	195 to 247
20 to 24 weeks	97	87.4	10	9.0	245 to 294	260 to 312
25 to 29 weeks	87	78.4	6	5.4	307 to 356	325 to 377
30 to 34 weeks	81	73.0	9	8.1	368 to 417	390 to 442
35 to 39 weeks	72	64.9	5	4.5	429 to 478	455 to 507
40 to 44 weeks	67	60.4	8	7.2	490 to 539	520 to 572
45 to 49 weeks	59	53.2	7	6.3	552 to 601	585 to 637
50 to 52 weeks	52	46.8	52	46.8	613 to 638	650 to 676
Total			111	100.0		

BASTERS (MALE).

[Possible earnings based on average weekly earnings of $17.08 and full weekly scale of $14.]

Up to 9 weeks	11	100.0	2	18.2	Up to $154	Up to $126
10 to 14 weeks	9	81.8			$171 to 239	$140 to 196
15 to 19 weeks	9	81.8			256 to 325	210 to 266
20 to 24 weeks	9	81.8			342 to 410	280 to 336
25 to 29 weeks	9	81.8	1	9.1	427 to 495	350 to 406
30 to 34 weeks	8	72.7			512 to 581	420 to 476
35 to 39 weeks	8	72.7	1	9.1	598 to 666	490 to 546
40 to 44 weeks	7	63.6	1	9.1	683 to 752	560 to 616
45 to 49 weeks	6	54.5	1	9.1	769 to 837	630 to 686
50 to 52 weeks	5	45.5	5	45.5	854 to 888	700 to 728
Total			11	100.0		

TABLE 7.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY COMBINED PAY-ROLL DATA FOR 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

FINISHERS (MALE).

[Possible earnings based on average weekly earnings of $14.68 and full weekly scale of $10.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	12	100.0	2	16.7	Up to $132	Up to $90
10 to 14 weeks	10	83.3			$147 to 206	$100 to 140
15 to 19 weeks	10	83.3			220 to 279	150 to 190
20 to 24 weeks	10	83.3	1	8.3	294 to 352	200 to 240
25 to 29 weeks	9	75.0			367 to 426	250 to 290
30 to 34 weeks	9	75.0			440 to 499	300 to 340
35 to 39 weeks	9	75.0	1	8.3	514 to 573	350 to 390
40 to 44 weeks	8	66.7			587 to 646	400 to 440
45 to 49 weeks	8	66.7	1	8.3	661 to 719	450 to 490
50 to 52 weeks	7	58.3	7	58.3	734 to 763	500 to 520
Total			12	100.0		

SAMPLE FINISHERS (MALE).

[Possible earnings based on average weekly earnings of $18.86; no weekly scale.]

Up to 9 weeks	10	100.0	1	10.0	Up to $170	
10 to 14 weeks	9	90.0	1	10.0	$189 to 264	
15 to 19 weeks	8	80.0			283 to 358	
20 to 24 weeks	8	80.0			377 to 453	
25 to 29 weeks	8	80.0	1	10.0	472 to 547	
30 to 34 weeks	7	70.0	1	10.0	566 to 641	
35 to 39 weeks	6	60.0			660 to 736	
40 to 44 weeks	6	60.0			754 to 830	
45 to 49 weeks	6	60.0			849 to 924	
50 to 52 weeks	6	60.0	6	60.0	943 to 981	
Total			10	100.0		

SKIRT FINISHERS (MALE).

[Possible earnings based on average weekly earnings of $10.12 and full weekly scale of $10.]

Up to 9 weeks	3	100.0	1	33.3	Up to $91	Up to $90
10 to 14 weeks	2	66.7			$101 to 142	$100 to 140
15 to 19 weeks	2	66.7	1	33.3	152 to 192	150 to 190
20 to 24 weeks	1	33.3			202 to 243	200 to 240
25 to 29 weeks	1	33.3			253 to 293	250 to 290
30 to 34 weeks	1	33.3	1	33.3	304 to 344	300 to 340
35 to 39 weeks						
40 to 44 weeks						
45 to 49 weeks						
50 to 52 weeks						
Total			3	100.0		

BASTERS (FEMALE).

[Possible earnings based on average weekly earnings of $12.58 and full weekly scale of $14.]

Up to 9 weeks	26	100.0	2	7.7	Up to $113	Up to $126
10 to 14 weeks	24	92.3	1	3.8	$126 to 176	$140 to 196
15 to 19 weeks	23	88.5	2	7.7	189 to 239	210 to 266
20 to 24 weeks	21	80.8	2	7.7	252 to 302	280 to 336
25 to 29 weeks	19	73.1	1	3.8	315 to 365	350 to 406
30 to 34 weeks	18	69.2	1	3.8	377 to 428	420 to 476
35 to 39 weeks	17	65.4			440 to 491	490 to 546
40 to 44 weeks	17	65.4	1	3.8	503 to 554	560 to 616
45 to 49 weeks	16	61.5	1	3.8	566 to 616	630 to 686
50 to 52 weeks	15	57.7	15	57.7	629 to 654	700 to 728
Total			26	100.0		

TABLE 7.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY COMBINED PAY-ROLL DATA FOR 90 ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Concluded.

FINISHERS (FEMALE).

[Possible earnings based on average weekly earnings of $10.91 and full weekly scale of $10.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	36	100.0	2	5.6	Up to $98	Up to $90
10 to 14 weeks	34	94.4	1	2.8	$109 to 153	$100 to 140
15 to 19 weeks	33	91.7	1	2.8	164 to 207	150 to 190
20 to 24 weeks	32	88.9	1	2.8	218 to 262	200 to 240
25 to 29 weeks	31	86.1	4	11.1	273 to 316	250 to 290
30 to 34 weeks	27	75.0	1	2.8	327 to 371	300 to 340
35 to 39 weeks	26	72.2			382 to 425	350 to 390
40 to 44 weeks	26	72.2	1	2.8	436 to 480	400 to 440
45 to 49 weeks	25	69.4	2	5.6	491 to 535	450 to 490
50 to 52 weeks	23	63.9	23	63.9	546 to 567	500 to 520
Total			36	100.0		

SAMPLE FINISHERS (FEMALE).

[Possible earnings based on average weekly earnings of $11.66; no weekly scale.]

Up to 9 weeks	16	100.0	1	6.3	Up to $105	
10 to 14 weeks	15	93.8	1	6.3	$117 to 163	
15 to 19 weeks	14	87.5	1	6.3	175 to 222	
20 to 24 weeks	13	81.3	1	6.3	233 to 280	
25 to 29 weeks	12	75.0			292 to 338	
30 to 34 weeks	12	75.0	2	12.5	350 to 396	
35 to 39 weeks	10	62.5			408 to 455	
40 to 44 weeks	10	62.5			466 to 513	
45 to 49 weeks	10	62.5	1	6.3	525 to 571	
50 to 52 weeks	9	56.3	9	56.3	583 to 606	
Total			16	100.0		

SKIRT FINISHERS (FEMALE).

[Possible earnings based on average weekly earnings of $9.66 and full weekly scale of $10.]

Up to 9 weeks	88	100.0	13	14.8	Up to $87	Up to $90
10 to 14 weeks	75	85.2	4	4.5	$97 to 135	$100 to 140
15 to 19 weeks	71	80.7	5	5.7	145 to 184	150 to 190
20 to 24 weeks	66	75.0	5	5.7	193 to 232	200 to 240
25 to 29 weeks	61	69.3	3	3.4	242 to 280	250 to 290
30 to 34 weeks	58	65.9	1	1.1	290 to 328	300 to 340
35 to 39 weeks	57	64.8	4	4.5	338 to 377	350 to 390
40 to 44 weeks	53	60.2	13	14.8	386 to 425	400 to 440
45 to 49 weeks	40	45.5	7	8.0	435 to 473	450 to 490
50 to 52 weeks	33	37.5	33	37.5	483 to 502	500 to 520
Total			88	100.0		

RELATION BETWEEN EMPLOYING CAPACITY OF SHOPS AND VARIATIONS IN EMPLOYMENT IN 90 ASSOCIATION SHOPS.

Table 7 shows, perhaps more clearly than Table 4, the wide range between the maximum and the minimum requirements of the industry for employees in the different occupations. It shows also what the greatest opportunity was for permanency of employment in each occupation. This table, however, can not be safely read except in connection with the following table (Table 8), which covers the 16 occupations, 12 for males and 4 for females, included in Tables 4 and 7 and shows the total number of schedules taken in the 90 shops in each of these occupations and for all of them combined. It should be noted that there are undoubtedly many duplications in Table 8, particularly in the cases of the shorter periods. This is due to the fact that individuals worked in more than one shop, often in three or more, during the year. A separate schedule was made out for each employee in each place, showing simply the amount of time he was employed in that shop. The result is that this table shows too large a total number of employees and too high a degree of irregularity of employment. The truth lies somewhere between the extremes of Table 8 and Table 7.

TABLE 8.—NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED NUMBER OF WEEKS IN SPECIFIED OCCUPATIONS ACCORDING TO INDIVIDUAL SCHEDULES TAKEN IN 90 ASSOCIATION SHOPS, AND EQUIVALENT NUMBER OF FULL-TIME WORKERS, AUGUST, 1912, TO JULY, 1913.

[In this table no attempt has been made to eliminate duplications from the records.]

Occupation.	Equivalent number of full-time workers.	Total number reported.	Number reported as working each classified number of weeks.													
			1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 52
MALE.																
Cutters	329	1,295	273	167	106	66	194	99	63	37	35	40	31	56	41	87
Skirt cutters	15	64	20	8	5	3	7	1	5	2	2	1	1	3	2	4
Canvas cutters	44	116	15	9	5	5	19	13	3	6	4	2	5	8	6	16
Jacket upper pressers	326	1,247	378	107	66	41	121	58	67	53	28	35	34	45	83	131
Jacket under pressers	237	1,119	316	105	62	50	156	72	56	42	39	34	33	43	66	45
Skirt upper pressers	78	230	44	24	8	11	27	10	10	7	5	6	13	13	14	38
Skirt under pressers	25	99	25	6	7	1	16	3	2	4	10	2	5	6	7	5
Part pressers	72	240	40	27	13	8	35	21	7	9	12	7	10	10	15	26
Basters	8	27	5	6	2	3	1	1	1	.....	1	1	1	.....	1	4
Finishers	9	23	5	1	.....	.....	6	2	.....	1	.....	1	.....	.....	1	6
Sample finishers	7	17	2	.....	1	3	4	2	.....	.....	.....	.....	.....	.....	.....	5
Skirt finishers	1	4	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....
Total	1,151	4,481	1,124	460	275	191	587	283	214	161	136	130	133	184	236	367
FEMALE.																
Basters	17	56	6	4	3	4	9	7	4	2	2	2	1	2	4	6
Finishers	28	103	26	8	5	11	12	3	5	7	4	2	.....	4	9	7
Sample finishers	11	54	14	8	7	1	5	7	2	.....	2	1	1	.....	1	5
Skirt finishers	54	164	20	14	11	7	20	17	7	11	7	8	7	7	11	17
Total	110	377	66	34	26	23	46	34	18	20	15	13	9	13	25	35
Grand total	1,261	4,858	1,190	494	301	214	633	317	232	181	151	143	142	197	261	402

The first column in Table 8 shows how many full-time workers would have been required to do the work performed by the much larger number irregularly employed. It is the number that could have been employed continuously throughout the entire year, without loss of time, if the work had been uniformly distributed over the entire period of 52 weeks.

The two parts of the table are not strictly comparable, however, as the first column is based upon the actual number of hours worked; to obtain this figure all the hours of overtime as well as regular time in each occupation were added together and the sum was divided by the total number of working hours in the year (2,518). At 50 hours per week for 52 weeks, the total would be 2,600, but it was found that the holidays amounted to 82 hours which must be deducted to obtain the actual working time.

The total number actually employed does not represent exactly the number of different individuals, as there undoubtedly were a large number of duplications in the cases of men who worked in more than one shop during the year. It is certain, however, that there were no duplicates in the cases of men reported as having worked 30 weeks or more, and probably very few in the other groups, except in the cases of those working less than 10 weeks.

In order to show how the equivalent number of full-time workers differs from the average number, obtained by dividing the total number of man-weeks in Table 4 by 52, the following table has been prepared:

TABLE 9.—COMPARISON OF EQUIVALENT NUMBER OF FULL-TIME WORKERS AND AVERAGE NUMBER EMPLOYED PER WEEK, BY OCCUPATIONS, FOR 90 ASSOCIATION SHOPS.

Occupation.	Equivalent number (Table 8).	Average number (Table 4).	Excess of average over equivalent number.	
			Number.	Per cent.
MALE.				
Cutters	329	342	13	4.0
Skirt cutters	15	15	.....	.....
Canvas cutters	44	43	[1] 1	[1] 2.3
Jacket upper pressers	326	387	61	18.7
Jacket under pressers	237	293	56	23.6
Skirt upper pressers	78	92	14	18.0
Skirt under pressers	25	32	7	28.0
Part pressers	72	84	12	16.7
Basters	8	8	.....	.....
Finishers	9	9	.....	.....
Sample finishers	7	7	.....	.....
Skirt finishers	1	1	.....	.....
Total	1,151	1,313	162	14.1
FEMALE.				
Basters	17	20	3	17.6
Finishers	28	29	1	3.6
Sample finishers	11	12	1	9.1
Skirt finishers	54	61	7	13.0
Total	110	122	12	10.9
Grand total	1,261	1,435	174	13.8

[1] Less than equivalent number.

This table indicates clearly what has already been noted, mainly, that the pressers, as a rule, are employed for part time more generally than the cutters are; that is, they have more fractional weeks in the course of the year. This accounts, in part at least, for the low average weekly earnings of pressers as shown in Table 4.

OPPORTUNITY FOR PERMANENT EMPLOYMENT IN 90 ASSOCIATION SHOPS.

The following tabulation, derived from Table 8, is based upon the assumption that employees who worked 40 weeks or more in one shop were permanently employed in the industry.

TABLE 10.—NUMBER AND PER CENT OF CUTTERS AND PRESSERS PERMANENTLY EMPLOYED, IN 90 ASSOCIATION SHOPS, AS SHOWN BY INDIVIDUAL SCHEDULES, BEFORE ELIMINATION OF DUPLICATIONS.

Occupation.	Total number reported.	Employees reported as employed 40 to 52 weeks.	
		Number.	Per cent.
Cutters	1,295	184	14.2
Skirt cutters	64	9	14.1
Canvas cutters	116	30	25.9
Jacket upper pressers	1,247	259	20.8
Jacket under pressers	1,119	154	13.8
Skirt upper pressers	230	65	28.3
Skirt under pressers	99	18	18.2
Part pressers	240	51	21.3
All occupations	4,858	860	17.7

This table apparently indicates a larger proportion of permanent employees among the pressers, with the exception of jacket under pressers, than among the cutters. In explanation of this difference in the permanency of the two occupations it may be said that a skilled presser is more necessary for giving a stylish appearance to a garment, especially a cheap one, than a good cutter, hence the employer is apt to retain his best pressers more permanently than his cutters.

The table is significant not only as showing the comparative permanency of the two occupations, but also as indicating the small percentage of the total number of employees permanently employed in the industry. These percentages are somewhat misleading, however, because the total number employed is swollen by a large number of duplications.

It was hoped that much of this duplication could be eliminated by matching up the individual schedules obtained from the various shops. This was undertaken in the case of the cutters but was not entirely successful. It was found that many shop pay rolls gave

only the first or last names of the employees. In some cases numbers only were given and a key to these numbers was not obtainable. Even where full names were found, identification was impossible in many cases because of the large number of identical or similar names. This was particularly the case with such names as Cohen, Levy, Levine, Schwartz, Rosenberg, and Friedman. Every effort was made, however, to trace each individual cutter's working history for the year covered by this investigation.

A search was made through all the schedules taken in other association shops not tabulated in this report, in independent shops, and so far as possible by means of the records at the headquarters of the cutters' union. The results of this effort to eliminate duplication of cutters are set forth in the following table:

TABLE 11.—NUMBER OF INDIVIDUAL CUTTERS EMPLOYED EACH WEEK IN 90 ASSOCIATION SHOPS, AS SHOWN BY SCHEDULES, AND PER CENT OF THE AVERAGE NUMBER EMPLOYED PER WEEK AND OF THE TOTAL NUMBER EMPLOYED DURING THE YEAR, AUGUST, 1912, TO JULY, 1913.

[Data are for a total of 965 individual cutters ascertained by eliminating duplications from the schedules and excluding 80 whose names were so common as to render a satisfactory matching of records impossible.]

Month.	Week No.	Number employed each week.	Per cent of average number employed per week (average=100 per cent).	Per cent of total number (965) employed during year.	Month.	Week No.	Number employed each week.	Per cent of average number employed per week (average=100 per cent).	Per cent of total number (965) employed during year.
August	1	422	116.1	43.7	February	27	530	145.9	54.9
	2	461	126.9	47.8		28	544	149.7	56.4
	3	493	135.7	51.1		29	552	151.9	57.2
	4	507	139.5	52.5		30	545	150.0	56.5
September	5	497	136.8	51.5	March	31	522	143.7	54.1
	6	471	129.6	48.8		32	494	136.0	51.2
	7	470	129.4	48.7		33	482	132.7	49.9
	8	464	127.7	48.1		34	446	122.8	46.2
October	9	483	132.9	50.1	April	35	363	99.9	37.6
	10	495	136.2	51.3		36	329	90.6	34.1
	11	459	126.3	47.6		37	290	79.8	30.1
	12	385	106.0	39.9		38	254	69.9	26.3
November	13	292	80.4	30.3	May	39	228	62.8	23.6
	14	223	61.4	23.1		40	224	61.7	23.2
	15	225	61.9	23.3		41	206	56.7	21.3
	16	210	57.8	21.8		42	199	54.8	20.6
	17	172	47.3	17.8		43	172	47.3	17.8
December	18	177	48.7	18.3	June	44	217	59.7	22.5
	19	191	52.6	19.8		45	260	71.6	26.9
	20	234	64.4	24.2		46	309	85.0	32.0
	21	246	67.7	25.5		47	323	88.9	33.5
January	22	274	75.4	28.4	July	48	301	82.8	31.2
	23	335	92.2	34.7		49	349	96.1	36.2
	24	405	111.5	42.0		50	382	105.1	39.6
	25	463	127.4	48.0		51	398	109.5	41.2
	26	505	139.0	52.3		52	415	114.2	43.0
					Average		363	100.0	37.6

For the reasons already stated, certain names were left out in the above table and in that which follows. They are, however, included under a separate caption in Table 13. Table 11 is constructed in the same manner as Table 4, except that earnings are not included. It is a summary of 965 individual schedules, giving a composite

record of employment for the year in all shops where each individual was found. These schedules, therefore, included some work done outside of the 90 shops covered by previous tabulations. It is significant that Table 11 shows a higher degree of irregularity of employment than Table 4 for cutters employed in the 90 shops alone, the percentage of excess of the largest number employed in any one week over the least number employed being 221 in the former and 207 in the latter. This seems to indicate that in securing work in other shops, supplemental to their employment in the 90 shops, they obtain such employment, as might naturally be expected, during the rush season rather than in the dull season. It does not seem that there was a larger amount of short-time employment in the other shops or that the seasonal fluctuations in those shops was greater. Table 12, which follows, shows the seasonal demand for cutters, as indicated by the records for 965 individuals.

TABLE 12.—SEASONAL DEMAND FOR CUTTERS EMPLOYED IN 90 ASSOCIATION SHOPS, AS SHOWN BY INDIVIDUAL SCHEDULES, AND THEIR POSSIBLE EARNINGS, AUGUST, 1912, TO JULY, 1913.

[Data are for 965 individual cutters employed during the year. The periods of employment include some time at work outside the 90 shops.]

Period.	Maximum number required in each period.		Cutters required for a full year and additional cutters required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings ($24.36).[1]	On basis of full weekly scale ($25).
Up to 9 weeks	552	100.0	58	10.5	Up to $219	Up to $225
10 to 14 weeks	494	89.5	24	4.3	$244 to 341	$250 to 350
15 to 19 weeks	470	85.1	24	4.3	365 to 463	375 to 475
20 to 24 weeks	446	80.8	61	11.1	487 to 585	500 to 600
25 to 29 weeks	385	69.7	56	10.1	609 to 706	625 to 725
30 to 34 weeks	329	59.6	39	7.1	731 to 828	750 to 850
35 to 39 weeks	290	52.5	56	10.1	853 to 950	875 to 975
40 to 44 weeks	234	42.4	17	3.1	974 to 1,072	1,000 to 1,100
45 to 49 weeks	217	39.3	40	7.3	1,096 to 1,194	1,125 to 1,225
50 to 52 weeks	177	32.1	177	32.1	1,218 to 1,267	1,250 to 1,300
Total	.....	.....	552	100.0	.....	.....

[1] The average weekly earnings used as the basis for the figures in this column were obtained from the shop tabulation of 90 firms. See Table 4.

The above table shows a somewhat different distribution of the demand for employees than is indicated by Table 7 for cutters, though the variations are not great.

In the following table the total number of cutters who were employed in the 90 shops is given. The number considered in the two preceding tables (965) and the number of those bearing the names which were so common as to render a satisfactory matching of records and the preparation of composite schedules impossible or inadvisable

are included under separate headings. The total figures are comparable with those in the original tabulations and will be used for that purpose.

TABLE 13.—INDIVIDUAL CUTTERS IN 90 ASSOCIATION SHOPS EMPLOYED EACH CLASSIFIED NUMBER OF WEEKS, AS SHOWN BY SCHEDULES, AND AVERAGE NUMBER EMPLOYED PER WEEK, AUGUST, 1912, TO JULY, 1913.

[The periods include some time at work outside the 90 shops.]

Group.	Total number actually engaged.	Number of cutters working each classified number of weeks.														Average number employed per week.
		1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 52	
Cohens, Friedmans, Levines, Levys, Rosenbergs, Schwartzes	80	16	9	6	3	7	10	7	3	8	3	1	.....	1	6	21
Other names	965	97	76	46	37	149	94	75	57	46	53	40	61	45	89	363
Total	1,045	113	85	52	40	156	104	82	60	54	56	41	61	46	95	384

By comparing this table with Table 8 it will be noted that 250 duplications have been eliminated. The average number of workers for the 52 weeks has been increased to 384, but as this figure is not based upon hours it is not exactly comparable with the 329 full-time workers in Table 8. It is comparable, however, with the average number (342) in Table 9, and therefore indicates that in tracing the working history of these cutters in other shops 42 man-years have been added. There is no doubt that a considerable number of duplications remain in Table 13. It is also true that it does not give a complete working history of the individuals included, for there are hundreds of shops, in New York and in other cities, where they may have been employed during some portion of the year. Moreover, they may have sought and found additional employment in other branches of the clothing industry in New York City or elsewhere.

The most significant feature of this table is the marked reduction in the number of individuals employed for 9 weeks and under, and the increase in the numbers of those who had employment for longer periods. It is especially noteworthy that 18 individuals have been added to the groups working 40 to 52 weeks, bringing the number of those who had practically permanent employment up to 202. A count of the number of weeks worked by this class shows that about one-half of all the cutters' work was done by these 202 individuals who earned from $974 to $1,267 during the year.

Comparison of Tables 12 and 13 brings out the fact that over against the 234 workers required for 40 weeks or more, there were 202, or 86.32

per cent, who really had that amount of employment. Without doubt a complete elimination of duplications would have increased this percentage somewhat.

These 202 workers constitute 19.3 per cent of the total number, 1,045. If the employees with similar or identical names, whose records could not be matched up satisfactorily, are left out and only the 965 other names are included, the percentage becomes 20.9.

The following tabulation has been prepared to bring out more clearly the contrast between Table 7 and Tables 8 and 13, and to show the changes of distribution by periods of employment effected through the elimination of duplications, so far as it was possible to accomplish that purpose:

TABLE 14.—DISTRIBUTION THROUGH SPECIFIED EMPLOYMENT PERIODS OF CUTTERS IN 90 ASSOCIATION SHOPS AS SHOWN BY ADDITIONAL NUMBER REQUIRED AT EACH SHORTER PERIOD, NUMBER REPORTED BY INDIVIDUAL SCHEDULES, AND ACTUAL NUMBER AFTER ELIMINATION OF DUPLICATIONS.

Period.	Cutters required for a full year and additional cutters required for each specified shorter period.		Cutters employed each classified number of weeks.			
			As reported by individual schedules.		After elimination of duplications from individual schedules.	
	Number.	Per cent of total (518) in period employing greatest number.	Number.	Per cent.	Number.	Per cent.
Up to 9 weeks	59	11.4	806	62.2	446	42.7
10 to 14 weeks	23	4.4	99	7.6	104	10.0
15 to 19 weeks	15	2.9	63	4.9	82	7.8
20 to 24 weeks	59	11.4	37	2.9	60	5.7
25 to 29 weeks	51	9.8	35	2.7	54	5.2
30 to 34 weeks	44	8.5	40	3.1	56	5.4
35 to 39 weeks	40	7.7	31	2.4	41	3.9
40 to 44 weeks	22	4.2	56	4.3	61	5.8
45 to 49 weeks	35	6.8	41	3.2	46	4.4
50 to 52 weeks	170	32.8	87	6.7	95	9.1
Total	518	100.0	1,295	100.0	1,045	100.0

The foregoing tables make it perfectly apparent that a large number of cutters are employed for only a few weeks each year. Some of these were doubtless just entering the occupation as beginners or new arrivals in the city, or, on the other hand, were dropping out through death, disability, departure from the city, or abandonment of the field for some other form of occupation. But when all deductions of this sort are made, it is probable that a very large number remain who are entirely dependent on this industry for support and who, by reason of the highly seasonal character of the business, may be called peak loaders. These persons find employment in the busy seasons, but not enough of it in the course of the year to support them in comfort or even decency.

The difficulty experienced in tracing the cutters' records was probably not so great as it would have been in the case of most of the other occupations. But no test could be made because the relations between the unions and the employers' association became somewhat strained immediately after the regular tabulations of the data for the 90 shops had been completed and the statistical bureau was closed before any further work could be undertaken.

It is necessary, therefore, to depend solely upon Tables 7 and 8 as to conclusions concerning the remaining occupations, but it is safe to assume that tendencies disclosed in the special study of the cutters would hold good in other occupations. For example, there were 184 cutters who had employment for 40 to 52 weeks, according to Table 8, while the corresponding number in Table 13 is 202. This is an increase of 18, or 10 per cent. In the following table this percentage of increase has been applied to the figures shown in Table 8 for each occupation.

TABLE 15.—NUMBER OF PERSONS ACTUALLY EMPLOYED 40 TO 52 WEEKS IN EACH SPECIFIED OCCUPATION AS SHOWN BY INDIVIDUAL SCHEDULES, COMPARED WITH NUMBER REQUIRED FOR THAT PERIOD AS SHOWN BY THE PAY ROLLS OF 90 ASSOCIATION SHOPS TAKEN AS A WHOLE.

Occupation.	Number required 40 to 52 weeks as shown by pay rolls.	Number actually employed 40 to 52 weeks.		Deficiency in number employed as compared with number required.	
		As reported by individual schedules.	After elimination of duplications.[1]	Number.	Per cent.
MALE.					
Cutters	227	184	202	25	11.0
Skirt cutters	12	9	10	2	16.7
Canvas cutters	32	30	33	[2] 1	[2] 3.1
Jacket upper pressers	342	259	285	57	16.7
Jacket under pressers	234	154	169	65	27.8
Skirt upper pressers	84	65	71	13	15.5
Skirt under pressers	22	18	20	2	9.1
Part pressers	67	51	56	11	16.4
Basters	7	5	6	1	14.3
Finishers	8	7	8	.....	.....
Sample finishers	6	5	6	.....	.....
Skirt finishers	.....	.....	.....	.....	.....
Total	1,041	787	866	175	16.8
FEMALE.					
Basters	17	12	13	4	23.5
Finishers	26	20	22	4	15.4
Sample finishers	10	6	7	3	30.0
Skirt finishers	53	35	38	15	28.3
Total	106	73	80	26	24.5
Grand total	1,147	860	946	201	17.5

[1] In this column the number of cutters shown is the number found to be actually employed 40 to 52 weeks after elimination of duplications. It was not possible, as explained on page 11, to eliminate duplications from the schedules for other occupations, hence the numbers for those occupations are estimated on the assumption that the schedules named show the same proportion of duplications as was found for cutters.

[2] Excess in number employed over number required.

The above table shows that on the average the actual employment apparently falls short of the highest degree of permanency that the 90 shops could possibly provide by about 17.5 per cent. Too much emphasis should not be put, however, upon the percentages in this table, especially where small absolute numbers are involved. When account is taken of the fact that the requirement or demand for workers comes from 90 separate shops and that the fluctuations of employment in the single shop are much greater than for the whole number of shops, 17.5 per cent does not seem too much of an allowance for lack of mobility on the part of employees in seeking and obtaining employment. It should be remembered, also, in this connection that this class of employees is composed very largely of those who work in only one shop during the year. The figures in the third column of Table 15 are for those who worked 40 to 52 weeks in only one shop.

Attention has already been called to the higher degree of regularity of employment afforded by this industry in some occupations than in others. Table 16, which follows, has been prepared to bring this point more clearly into view.

TABLE 16.—OPPORTUNITY FOR PERMANENT EMPLOYMENT FURNISHED BY THE INDUSTRY AS SHOWN BY COMPARING THE NUMBER EMPLOYED AT THE PERIOD EMPLOYING THE GREATEST NUMBER (ASSUMED TO BE THE MAXIMUM FORCE NEEDED DURING THE YEAR) WITH THE NUMBER EMPLOYED 40 TO 52 WEEKS (ASSUMED TO BE THE NUMBER PERMANENTLY NEEDED), BY OCCUPATIONS.

[This table is based on the combined pay-roll data for 90 association shops, as shown in Table 7.]

Occupation.	Greatest number employed in any week.	Employees required for 40 to 52 weeks.	
		Number.	Per cent.
MALE.			
Cutters	518	227	43.8
Skirt cutters	25	12	48.0
Canvas cutters	60	32	53.3
Jacket upper pressers	471	342	72.6
Jacket under pressers	405	234	57.8
Skirt upper pressers	113	84	74.3
Skirt under pressers	47	22	46.8
Part pressers	111	67	60.4
Basters	11	7	63.6
Finishers	12	8	66.7
Sample finishers	10	6	60.0
Skirt finishers	3	.....	.....
Total	1,786	1,041	58.3
FEMALE.			
Basters	26	17	65.4
Finishers	36	26	72.2
Sample finishers	16	10	62.5
Skirt finishers	88	53	60.2
Total	166	106	63.9
Grand total	1,952	1,147	58.8

Table 16 shows that, based on the seasonal demands for employees as shown by the combined pay rolls of 90 association shops, the opportunity for permanent employment furnished by the industry ranges from 43.8 per cent for the cutters to 74.3 per cent for the skirt upper pressers, and that the average for both sexes and all occupations is 58.8 per cent. By comparing the total number actually employed 40 to 52 weeks, after elimination of duplications as shown in Table 15, with the maximum employed in any week as shown in Table 16, it will be seen that approximately 48 per cent of all the workers necessary to man the industry in the busiest season were actually able to obtain employment for 40 to 52 weeks during the year.

It is probable that a complete elimination of duplicate records would bring the number employed for 40 to 52 weeks up to 50 per cent of the maximum number required in the busiest week. A glance at the possible earnings of this class of employees in each of the occupations, as given in Table 7, shows that these earnings are adequate and probably satisfactory. Table 7 shows, then, that the maximum requirement is about double the number who actually find employment for 40 to 52 weeks, but it is probable that a somewhat larger number are actually dependent upon the industry for support, for it is reasonable to suppose that there is some unemployed labor, even at the height of the busy season. Temporary disability, illness, and imperfect mobility must result in keeping a certain number of persons out of the shops even when the demand for their services is the greatest. How large this surplusage of labor is can not be ascertained from the data at hand. The total number of persons engaged in the industry, however, must lie somewhere between the extremes shown by Tables 7 and 8. Table 7 shows that only 1,952 employees were required at the busiest season in the 90 shops in the 16 occupations tabulated in this report, while Table 8 discloses a total of 4,858 individual schedules for the same shops. Even if this number is reduced by 17.5 per cent, which was the approximate extent of the reduction, as shown in Table 16, the resulting number would still be 4,008, or over 100 per cent above the maximum requirement (1,952) and 249 per cent above the number required for 40 to 52 weeks (1,147). It can not be possible that all of this excess is due to further duplication of records, though a considerable part of it may doubtless be so explained. The probabilities are, as these figures seem to indicate, that there is a considerable surplusage above the maximum number of employees required at the busiest season.

But assuming that this is not the case, it may be worth while to see whether the wages paid are sufficient to afford satisfactory earnings to the number unquestionably required by the industry as it is now conducted. This is shown in the following table, which also presents in a parallel column the average earnings based on the total number of individuals employed during the year, as shown by individual schedules.

TABLE 17.—ANNUAL PAY ROLL, AND AVERAGE YEARLY EARNINGS BASED ON GREATEST NUMBER OF EMPLOYEES IN ANY ONE WEEK AS SHOWN BY THE COMBINED PAY ROLLS AND ON THE NUMBER EMPLOYED DURING THE YEAR AS SHOWN BY INDIVIDUAL SCHEDULES, IN 90 ASSOCIATION SHOPS, BY OCCUPATIONS.

Occupation.	Annual pay roll.	Greatest number employed at any season.	Individuals actually employed during year.[1]	Average earnings based on—	
				Greatest number employed at any season.	Number actually employed during year.
MALE.					
Cutters	$433,315	518	1,045	$837	$415
Skirt cutters	16,812	25	52	672	323
Canvas cutters	37,055	60	93	618	398
Jacket upper pressers	355,394	471	1,006	755	353
Jacket under pressers	219,397	405	903	542	243
Skirt upper pressers	78,027	113	185	691	422
Skirt under pressers	22,112	47	80	470	276
Part pressers	53,688	111	194	484	277
Basters	7,124	11	22	648	324
Finishers	6,987	12	18	582	388
Sample finishers	7,281	10	15	728	485
Skirt finishers	496	3	3	165	165
FEMALE.					
Basters	12,866	26	45	495	286
Finishers	16,621	36	83	462	200
Sample finishers	7,436	16	44	465	169
Skirt finishers	30,595	88	132	348	232

[1] This column shows the number reported on individual schedules, after elimination of duplications. It was possible to make actual eliminations only in the case of cutters, as explained on page 11. The numbers for other occupations are estimated on the assumption that the schedules for these would show the same proportion of duplication as was found for cutters.

The average earnings based on the greatest number of employees at any season, as shown in the above table, have significance only as indicating the best that could be hoped for in the way of general support for the workers in this industry with its present seasonal fluctuations. They indicate the amounts which the employees in each occupation could earn in the course of the year if the 90 shops were combined into one shop and the employment which they now provide were equally apportioned. In striking contrast with this is shown in the last column the average earnings per employee if the total amount paid in wages by the industry were distributed among all the individuals employed during the year.

FLUCTUATIONS IN EMPLOYMENT AND EARNINGS IN 13 NON-ASSOCIATION SHOPS, BY OCCUPATIONS.

Shops in the cloak, suit, and skirt industry of New York City that have collective agreements with the unions, but do not belong to members of the Cloak, Suit, and Skirt Manufacturers' Protective Association are known as "independent" or nonassociation shops. As stated elsewhere in this report, the terms on which these agreements are based are essentially the same as those stipulated in the protocol of peace of September 2, 1910. An effort was therefore made to find out the actual earnings of workers in these shops as compared with earnings of workers employed under the protocol.

As the nonassociation manufacturers were not a party to the statistical investigation of the industry undertaken by its board of arbitration it was rather difficult to gain access to the pay-roll records of the nonassociation shops.

This report presents the results of investigation of pay rolls of 13 relatively large nonassociation shops. The total pay roll for all productive labor for the year of these 13 firms was somewhat over $850,000.

The following table, which is similar in form to Table 4, shows for week workers in each of 6 occupations in the 13 nonassociation shops the number employed and their total and average earnings each week during the year August, 1912, to July, 1913. Columns also are given showing the fluctuations in employment and earnings from week to week expressed in percentages that the number employed each week and their total earnings are of the average number of employees and average pay roll per week for the year.

TABLE 18.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR IN 13 NONASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	54	$1,255	$23.24	103	101
	2	64	1,534	23.97	122	124
	3	72	1,677	23.29	137	135
	4	78	2,005	25.71	148	162
September	5	85	2,112	24.85	162	170
	6	74	1,466	19.81	141	118
	7	75	1,759	23.45	143	142
	8	70	1,678	23.97	133	135
October	9	71	1,605	22.61	135	129
	10	75	1,825	24.33	143	147
	11	75	1,832	24.43	143	148
	12	64	1,536	24.00	122	124
	13	45	1,054	23.42	86	85
November	14	42	909	21.64	80	73
	15	41	962	23.46	78	78
	16	42	964	22.95	80	78
	17	38	842	22.16	72	68
December	18	26	558	21.46	49	45
	19	27	566	20.96	51	46
	20	34	742	21.82	65	60
	21	37	854	23.08	70	69
January	22	48	985	20.52	91	79
	23	59	1,386	23.49	112	112
	24	47	1,164	24.77	89	94
	25	54	1,335	24.72	103	108
	26	61	1,446	23.70	116	117
February	27	72	$1,701	$23.63	137	137
	28	74	1,848	24.97	141	149
	29	80	1,973	24.66	152	159
	30	88	2,161	24.56	167	174
March	31	76	1,825	24.01	145	147
	32	72	1,756	24.39	137	142
	33	72	1,755	24.38	137	142
	34	65	1,635	25.15	124	132
April	35	53	1,186	22.38	101	96
	36	51	1,231	24.14	97	99
	37	40	895	22.38	76	72
	38	32	734	22.94	61	59
	39	31	707	22.81	59	57
May	40	29	613	21.14	55	49
	41	31	719	23.19	59	58
	42	26	618	23.77	49	50
	43	25	537	21.48	48	43
June	44	34	803	23.62	65	65
	45	38	920	24.21	72	74
	46	41	981	23.93	78	79
	47	45	1,127	25.04	86	91
July	48	43	1,013	24.26	82	84
	49	43	1,009	23.47	82	81
	50	40	942	23.55	76	76
	51	40	913	22.83	76	74
	52	34	775	22.79	65	63
Total			64,458			
Average		52.56	1,240	23.59	100	100

TABLE 18.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR IN 13 NONASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	5	$87	$17.40	67	57	February	27	8	$172	$21.50	107	113
	2	8	157	19.63	107	103		28	8	192	24.00	107	126
	3	7	151	21.57	94	99		29	8	207	25.88	107	136
	4	9	193	21.44	121	127		30	8	207	25.88	107	136
September	5	9	193	21.44	121	127	March	31	9	193	21.44	121	127
	6	8	112	14.00	107	74		32	9	193	21.44	121	127
	7	8	144	18.00	107	95		33	9	195	21.67	121	128
	8	8	172	21.50	107	113		34	9	200	22.22	121	132
October	9	8	172	21.50	107	113	April	35	9	193	21.44	121	127
	10	4	88	22.00	54	58		36	8	160	20.00	107	105
	11	6	124	20.67	81	82		37	8	80	10.00	107	53
	12	6	104	17.33	81	68		38	8	168	21.00	107	111
	13	6	130	21.67	81	86		39	5	84	16.80	67	55
November	14	4	88	22.00	54	58	May	40	7	138	19.71	94	91
	15	6	130	21.67	81	86		41	8	154	19.25	107	101
	16	8	170	21.25	107	112		42	8	158	19.75	107	104
	17	6	98	16.33	81	65		43	7	137	19.57	94	90
December	18	8	172	21.50	107	113	June	44	8	172	21.50	107	113
	19	6	130	21.67	81	86		45	4	88	22.00	54	58
	20	9	189	21.00	121	124		46	8	158	19.75	107	104
	21	4	88	22.00	54	58		47	8	150	18.75	107	99
January	22	4	74	18.50	54	49		48	7	138	19.71	94	91
	23	6	125	20.83	81	82		49	7	151	21.57	94	99
	24	9	173	19.22	121	114	July	50	9	187	20.78	121	123
	25	9	193	21.44	121	127		51	10	206	20.60	134	136
	26	9	191	21.22	121	126		52	10	168	16.80	134	111
							Total			7,897			
							Average		7.44	151.86	20.41	100	100

JACKET UPPER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	38	$716	$18.84	108	123	Febru- ary	27	39	$760	$19.49	111	130
	2	40	752	18.80	114	129		28	39	816	20.92	111	140
	3	40	797	19.93	114	136		29	41	809	19.73	117	139
	4	40	779	19.48	114	133		30	39	823	21.10	111	141
September	5	40	803	20.08	114	138	March	31	41	883	21.54	117	151
	6	39	537	13.77	111	92		32	44	874	19.86	125	150
	7	42	820	19.52	119	140		33	44	965	21.93	125	165
	8	43	801	18.63	122	137		34	43	765	17.79	122	131
October	9	44	818	18.59	125	140	April	35	41	699	17.05	117	120
	10	39	776	19.90	111	133		36	38	711	18.71	108	122
	11	41	799	19.49	117	137		37	38	720	18.95	108	123
	12	38	673	17.71	108	115		38	34	411	12.09	97	70
	13	35	507	14.49	100	87		39	31	372	12.00	88	64
November	14	34	473	13.91	97	81	May	40	33	444	13.45	93	76
	15	32	473	14.78	91	81		41	29	316	10.90	82	54
	16	32	444	13.88	91	76		42	26	305	11.73	74	52
	17	32	388	12.13	91	66		43	24	295	12.29	68	51
December	18	30	289	9.63	85	49	June	44	26	239	9.19	74	41
	19	26	196	7.54	74	34		45	21	250	11.90	60	43
	20	24	200	8.33	68	34		46	32	382	11.94	91	65
	21	25	217	8.68	71	37		47	29	476	16.41	82	82
January	22	25	286	11.44	71	49	July	48	31	520	16.77	88	89
	23	28	379	13.54	80	65		49	35	633	18.09	100	108
	24	32	595	18.59	91	102		50	38	679	17.87	108	116
	25	37	738	19.95	105	126		51	39	634	16.26	111	109
	26	39	707	18.13	111	121		52	39	623	15.97	111	107
							Total			30,367			
							Average		35.17	583.98	16.60	100	100

TABLE 18.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR IN 13 NONASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

JACKET UNDER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	27	$443	$16.41	108	127
	2	29	451	15.55	116	129
	3	33	540	16.36	132	155
	4	30	507	16.90	120	145
September	5	30	540	18.00	120	155
	6	30	401	13.37	120	115
	7	29	495	17.07	116	142
	8	28	476	17.00	112	136
October	9	26	444	17.08	104	127
	10	28	481	17.18	112	138
	11	28	431	15.39	112	124
	12	27	377	13.96	108	108
November	13	23	267	11.61	92	77
	14	20	206	10.30	80	59
	15	22	259	11.77	88	74
	16	23	311	13.52	92	89
	17	20	253	12.65	80	73
December	18	20	193	9.65	80	55
	19	14	61	4.36	56	17
	20	12	107	8.92	48	31
	21	17	126	7.41	68	36
January	22	18	187	10.39	72	54
	23	22	250	11.36	88	72
	24	24	420	17.50	96	120
	25	22	419	19.05	88	120
	26	27	463	17.15	108	133
February	27	27	$494	$18.30	108	142
	28	28	498	17.79	112	143
	29	35	510	14.57	140	146
	30	38	640	16.84	152	184
March	31	33	529	16.03	132	152
	32	31	513	16.55	124	147
	33	29	506	17.45	116	145
	34	28	373	13.32	112	107
April	35	26	376	14.46	104	108
	36	26	388	14.92	104	111
	37	26	361	13.88	104	104
	38	23	198	8.61	92	57
May	39	23	200	8.70	92	57
	40	24	248	10.33	96	71
	41	20	108	5.40	80	31
	42	16	155	9.69	64	44
	43	15	132	8.80	60	38
June	44	18	111	6.17	72	32
	45	20	129	6.45	80	37
	46	25	214	8.56	100	61
	47	23	312	13.57	92	89
July	48	22	336	15.27	88	96
	49	30	450	15.00	120	129
	50	30	454	15.13	120	130
	51	30	406	13.53	120	116
	52	28	385	13.75	112	110
Total			18,134			
Average		25.06	348.63	13.92	100	100

SKIRT UPPER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	19	$325	$17.11	118	126
	2	18	318	17.67	112	123
	3	19	342	18.00	118	132
	4	19	388	20.42	118	150
September	5	19	382	20.11	118	148
	6	17	236	13.88	106	91
	7	17	300	17.65	106	116
	8	17	332	19.53	106	129
October	9	19	312	16.42	118	121
	10	19	319	16.79	118	123
	11	19	316	16.63	118	122
	12	18	284	15.78	112	110
November	13	16	195	12.19	100	75
	14	13	173	13.31	81	67
	15	14	160	11.43	87	62
	16	13	154	11.85	81	60
	17	12	144	12.00	75	56
December	18	13	173	13.31	81	67
	19	13	139	10.69	81	54
	20	11	144	13.09	68	56
	21	11	131	11.91	68	51
January	22	11	152	13.82	68	59
	23	13	193	14.85	81	75
	24	15	236	15.73	93	91
	25	15	276	18.40	93	107
	26	17	277	16.29	106	107
February	27	20	$331	$16.55	124	128
	28	18	364	20.22	112	141
	29	19	359	18.89	118	139
	30	17	374	22.00	106	144
March	31	17	393	23.12	106	152
	32	18	399	22.17	112	154
	33	19	378	19.89	118	146
	34	16	301	18.81	100	117
April	35	17	245	14.41	106	95
	36	17	307	18.06	106	119
	37	17	323	19.00	106	125
	38	16	192	12.00	100	74
May	39	16	178	11.13	100	69
	40	16	215	13.44	100	83
	41	16	232	14.50	100	90
	42	16	217	13.56	100	84
	43	16	209	13.06	100	81
June	44	15	190	12.67	93	74
	45	14	203	14.50	87	79
	46	14	190	13.57	87	74
	47	15	196	13.07	93	76
July	48	15	220	14.67	93	85
	49	17	250	14.71	106	97
	50	15	240	16.00	93	93
	51	17	267	15.71	106	103
	52	16	258	16.13	100	100
Total			13,432			
Average		16.08	258.38	16.07	100	100

TABLE 18.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR IN 13 NON-ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Concluded.

SKIRT UNDER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	9	$135	$15.00	96	116	February	27	11	$127	$11.55	117	109
	2	9	139	15.44	96	119		28	11	115	10.45	117	98
	3	11	168	15.27	117	144		29	10	163	16.30	106	140
	4	10	151	15.10	106	129		30	9	153	17.00	96	131
September	5	10	154	15.40	106	132	March	31	10	149	14.90	106	128
	6	11	115	10.45	117	98		32	11	182	16.55	117	156
	7	9	121	13.44	96	104		33	10	156	15.60	106	134
	8	11	163	14.82	117	140		34	10	152	15.20	106	130
	9	11	144	13.09	117	123		35	10	134	13.40	106	115
October	10	11	136	12.36	117	116	April	36	10	130	13.00	106	111
	11	11	126	11.45	117	108		37	10	136	13.60	106	116
	12	11	113	10.27	117	97		38	10	65	6.50	106	56
	13	10	100	10.00	106	86		39	9	78	8.67	96	67
November	14	9	93	10.33	96	80	May	40	9	99	11.00	96	85
	15	7	75	10.71	74	64		41	9	114	12.67	96	98
	16	7	105	15.00	74	90		42	9	124	13.78	96	106
	17	8	93	11.63	85	80		43	9	104	11.56	96	89
December	18	8	105	13.13	85	90	June	44	9	104	11.56	96	89
	19	9	120	13.33	96	103		45	9	88	9.78	96	75
	20	7	95	13.57	74	81		46	9	76	8.44	96	65
	21	8	66	8.25	85	56		47	9	94	10.44	96	80
January	22	8	71	8.88	85	61	July	48	8	71	8.88	85	61
	23	8	109	13.63	85	93		49	9	104	11.56	96	89
	24	8	94	11.75	85	80		50	9	95	10.56	96	81
	25	10	98	9.80	106	84		51	9	124	13.78	96	106
	26	11	111	10.09	117	95		52	10	138	13.80	106	118
							Total			6,075			
							Average		9.42	116.83	12.40	100	100

SKIRT FINISHERS (FEMALE).

August	1	12	$116	$9.67	109	115	February	27	11	$96	$8.73	100	95
	2	12	125	10.42	109	124		28	11	102	9.27	100	101
	3	12	129	10.75	109	128		29	11	127	11.55	100	126
	4	12	130	10.83	109	129		30	11	134	12.18	100	133
September	5	12	122	10.17	109	121	March	31	11	124	11.27	100	123
	6	12	85	7.08	109	84		32	11	122	11.09	100	121
	7	12	116	9.67	109	115		33	11	129	11.73	100	128
	8	12	131	10.92	109	130		34	11	120	10.91	100	119
	9	12	117	9.75	109	116		35	11	115	10.45	100	114
October	10	11	81	7.64	100	83	April	36	11	109	9.91	100	108
	11	11	90	8.18	100	89		37	11	100	9.09	100	99
	12	12	100	8.33	109	99		38	11	54	4.91	100	53
	13	12	125	10.42	109	124		39	11	71	6.45	100	70
November	14	11	102	9.27	100	101	May	40	10	93	9.30	91	92
	15	10	84	8.40	91	83		41	10	92	9.20	91	91
	16	10	103	10.30	91	102		42	11	99	9.00	100	98
	17	10	93	9.30	91	92		43	11	90	8.18	100	89
December	18	10	98	9.80	91	97	June	44	11	96	8.73	100	95
	19	10	113	11.30	91	112		45	12	84	7.00	109	83
	20	10	94	9.40	91	93		46	12	93	7.75	109	92
	21	10	61	6.10	91	60		47	11	95	8.64	100	94
January	22	10	69	6.90	91	68	July	48	10	82	8.20	91	81
	23	10	94	9.40	91	93		49	11	84	7.64	100	83
	24	10	84	8.40	91	83		50	11	102	9.27	100	101
	25	11	83	7.55	100	82		51	10	93	9.30	91	92
	26	11	95	8.64	100	94		52	11	96	8.73	100	95
							Total			5,245			
							Average		10.98	100.87	9.19	100	100

SEASONAL DEMAND FOR EMPLOYEES AND OPPORTUNITY FOR EARNINGS IN 13 NONASSOCIATION SHOPS, BY OCCUPATIONS.

The following table is derived from Table 18 and shows for the six occupations specified the number of employees required to carry on the work in the 13 nonassociation shops during the year. This table is constructed on the same plan as Table 7, to the analysis of which reference should be made for an explanation of the method of tabulation employed. The last two columns show possible earnings in each period of employment based on average weekly earnings and on full weekly scale.

TABLE 19.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS, AS SHOWN BY COMBINED PAY-ROLL DATA FOR 13 NONASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

CUTTERS.

[Possible earnings based on average weekly earnings of $23.59 and full weekly scale of $25.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	88	100.0	14	16.0	Up to $212	Up to $225
10 to 14 weeks	74	84.1	3	3.4	$236 to 330	$250 to 350
15 to 19 weeks	71	80.7	10	11.3	354 to 448	375 to 475
20 to 24 weeks	61	69.3	10	11.3	472 to 566	500 to 600
25 to 29 weeks	51	58.0	8	9.1	590 to 684	625 to 725
30 to 34 weeks	43	48.9	2	2.3	708 to 802	750 to 850
35 to 39 weeks	41	46.6	3	3.4	826 to 920	875 to 975
40 to 44 weeks	38	43.2	6	6.8	944 to 1,038	1,000 to 1,100
45 to 49 weeks	32	36.4	6	6.8	1,062 to 1,156	1,125 to 1,225
50 to 52 weeks	26	29.5	26	29.5	1,180 to 1,227	1,250 to 1,300
Total	.....	.....	88	100.0	.....	.....

SKIRT CUTTERS.

[Possible earnings based on average weekly earnings of $20.41 and full weekly scale of $21.]

Up to 9 weeks	10	100.0	1	10.0	Up to $184	Up to $189
10 to 14 weeks	9	90.0	1	10.0	$204 to 286	$210 to 294
15 to 19 weeks	8	80.0	.....	.....	306 to 388	315 to 399
20 to 24 weeks	8	80.0	.....	.....	408 to 490	420 to 504
25 to 29 weeks	8	80.0	.....	.....	510 to 592	525 to 609
30 to 34 weeks	8	80.0	1	10.0	612 to 694	630 to 714
35 to 39 weeks	7	70.0	1	10.0	714 to 796	735 to 819
40 to 44 weeks	6	60.0	.....	.....	816 to 898	840 to 924
45 to 49 weeks	6	60.0	2	20.0	918 to 1,000	945 to 1,029
50 to 52 weeks	4	40.0	4	40.0	1,021 to 1,061	1,050 to 1,092
Total	.....	.....	10	100.0	.....	.....

TABLE 19.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS, AS SHOWN BY COMBINED PAY-ROLL DATA FOR 13 NONASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

JACKET UPPER PRESSERS.

[Possible earnings based on average weekly earnings of $16.60 and full weekly scale of $21.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in eriod employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	44	100.0	3	6.8	Up to $149	Up to $189
10 to 14 weeks	41	93.2	2	4.5	$166 to 232	$210 to 294
15 to 19 weeks	39	88.6	.....	.....	249 to 315	315 to 399
20 to 24 weeks	39	88.6	1	2.3	332 to 398	420 to 504
25 to 29 weeks	38	86.4	3	6.8	415 to 481	525 to 609
30 to 34 weeks	35	79.5	3	6.8	498 to 564	630 to 714
35 to 39 weeks	32	72.7	1	2.3	581 to 647	735 to 819
40 to 44 weeks	31	70.5	5	11.4	664 to 730	840 to 924
45 to 49 weeks	26	59.1	2	4.5	747 to 813	945 to 1,029
50 to 52 weeks	24	54.5	24	54.5	830 to 863	1,050 to 1,092
Total	.....	.....	44	100.0	.....	.....

JACKET UNDER PRESSERS.

[Possible earnings based on average weekly earnings of $13.92 and full weekly scale of $18.]

Up to 9 weeks	38	100.0	8	21.1	Up to $125	Up to $162
10 to 14 weeks	30	78.9	2	5.3	$139 to 195	$180 to 252
15 to 19 weeks	28	73.7	.....	.....	209 to 264	270 to 342
20 to 24 weeks	28	73.7	2	5.3	278 to 334	360 to 432
25 to 29 weeks	26	68.4	2	5.3	348 to 404	450 to 522
30 to 34 weeks	24	63.2	1	2.6	418 to 473	540 to 612
35 to 39 weeks	23	60.5	1	2.6	487 to 543	630 to 702
40 to 44 weeks	22	57.9	2	5.3	557 to 612	720 to 792
45 to 49 weeks	20	52.6	5	13.2	626 to 682	810 to 882
50 to 52 weeks	15	39.5	15	39.5	696 to 724	900 to 936
Total	.....	.....	38	100.0	.....	.....

SKIRT UPPER PRESSERS.

[Possible earnings based on average weekly earnings of $16.07 and full weekly scale of $19.]

Up to 9 weeks	20	100.0	1	5.0	Up to $145	Up to $171
10 to 14 weeks	19	95.0	2	10.0	$161 to 225	$190 to 266
15 to 19 weeks	17	85.0	.....	.....	241 to 305	285 to 361
20 to 24 weeks	17	85.0	.....	.....	321 to 386	380 to 456
25 to 29 weeks	17	85.0	1	5.0	402 to 466	475 to 551
30 to 34 weeks	16	80.0	1	5.0	483 to 546	570 to 646
35 to 39 weeks	15	75.0	.....	.....	562 to 627	665 to 741
40 to 44 weeks	15	75.0	2	10.0	643 to 707	760 to 836
45 to 49 weeks	13	65.0	2	10.0	723 to 787	855 to 931
50 to 52 weeks	11	55.0	11	55.0	804 to 836	950 to 988
Total	.....	.....	20	100.0	.....	.....

TABLE 19.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS, AS SHOWN BY COMBINED PAY-ROLL DATA FOR 13 NONASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Concluded.

SKIRT UNDER PRESSERS.

[Possible earnings based on average weekly earnings of $12.40 and full weekly scale of $15.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	11	100.0			Up to $112	Up to $135
10 to 14 weeks	11	100.0	1	9.1	$124 to 174	$150 to 210
15 to 19 weeks	10	90.9			186 to 236	225 to 285
20 to 24 weeks	10	90.9	1	9.1	248 to 298	300 to 360
25 to 29 weeks	9	81.8			310 to 360	375 to 435
30 to 34 weeks	9	81.8			372 to 422	450 to 510
35 to 39 weeks	9	81.8			434 to 484	525 to 585
40 to 44 weeks	9	81.8	1	9.1	496 to 546	600 to 660
45 to 49 weeks	8	72.7	1	9.1	558 to 608	675 to 735
50 to 52 weeks	7	63.6	7	63.6	620 to 645	750 to 780
Total			11	100.0		

SKIRT FINISHERS (FEMALE).

[Possible earnings based on average weekly earnings of $9.19 and full weekly scale of $10.]

Up to 9 weeks	12	100.0			Up to $83	Up to $90
10 to 14 weeks	12	100.0	1	8.3	$92 to 129	$100 to 140
15 to 19 weeks	11	91.7			138 to 175	150 to 190
20 to 24 weeks	11	91.7			184 to 221	200 to 240
25 to 29 weeks	11	91.7			230 to 267	250 to 290
30 to 34 weeks	11	91.7			276 to 312	300 to 340
35 to 39 weeks	11	91.7	1	8.3	322 to 358	350 to 390
40 to 44 weeks	10	83.3			368 to 404	400 to 440
45 to 49 weeks	10	83.3			414 to 450	450 to 490
50 to 52 weeks	10	83.3	10	83.3	460 to 478	500 to 520
Total			12	100.0		

SEASONAL FLUCTUATIONS IN EMPLOYMENT IN ASSOCIATION AND NONASSOCIATION SHOPS.

The totals of the annual pay rolls of the 13 association and of the 13 nonassociation shops upon which this comparison is based were $844,082 and $852,023, respectively. The average weekly pay roll for the year used as the base (or 100) in computing the percentages showing fluctuations from week to week was $16,232 for the association and $16,385 for the nonassociation group.

Table 20, here presented, and Chart 2, which follows, show that the busy and slack periods occur at approximately the same parts of the year. However, the major fluctuations of the pay roll in the nonassociation shops are not as violent as those in the association shops in the corresponding periods of the year; that is, in the nonassociation shops the peaks of the year are not as high and the declinations of business during the slack seasons not as low as in the

shops belonging to members of the Manufacturers' Protective Association. The highest and lowest percentages of the average weekly pay roll in the association and the nonassociation shops were as follows:

	Highest.	Lowest.
Association shops	173.6	38.5
Nonassociation shops	151.2	58.2

The following table shows the fluctuations from week to week:

TABLE 20.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 13 ASSOCIATION AND 13 NONASSOCIATION SHOPS, EXPRESSED IN PERCENTAGES OF THE AVERAGE WEEKLY PAY ROLL FOR ALL PRODUCTIVE LABOR, AUGUST, 1912, TO JULY, 1913.

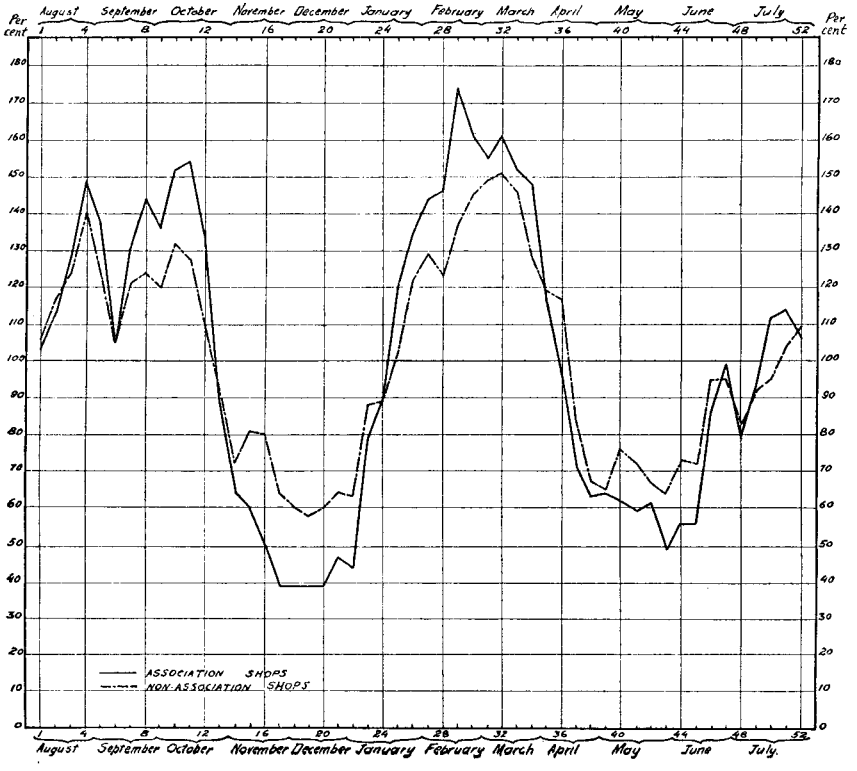
Week No.	Per cent of average weekly pay roll in—		Week No.	Per cent of average weekly pay roll in—	
	13 association shops.	13 nonassociation shops.		13 association shops.	13 nonassociation shops.
1	102.6	106.3	27	144.3	128.7
2	113.0	117.1	28	145.6	123.3
3	128.3	123.7	29	173.6	136.8
4	149.3	140.2	30	160.9	144.5
5	137.1	123.0	31	155.4	149.4
6	104.9	105.3	32	160.6	151.2
7	131.0	120.7	33	151.9	145.8
8	144.0	124.4	34	148.4	128.1
9	136.4	120.4	35	116.4	118.7
10	152.2	132.2	36	96.0	117.4
11	153.9	127.3	37	70.9	84.2
12	133.1	109.1	38	62.8	66.7
13	89.4	90.5	39	63.6	64.9
14	64.2	72.3	40	62.2	75.6
15	60.1	80.6	41	59.4	72.3
16	50.3	80.1	42	61.2	67.2
17	38.7	63.6	43	49.0	64.2
18	38.6	59.8	44	55.5	72.8
19	38.7	58.2	45	55.7	72.3
20	38.5	59.6	46	86.2	94.9
21	46.5	64.0	47	99.2	94.5
22	43.9	62.9	48	78.5	83.2
23	79.3	88.3	49	92.9	92.0
24	89.9	88.9	50	112.2	95.2
25	119.8	101.6	51	113.5	104.2
26	135.0	121.5	52	105.6	110.4

It has been shown in Table 20 and in Chart 2 that fluctuations of employment in association and nonassociation shops, though varying here and there, indicate substantially the same dull and busy seasons, but that employment in nonassociation shops throughout the year seems to be somewhat more regular than in association shops.

The following table and the accompanying charts (Nos. 3 to 9) show fluctuations of employment in association and nonassociation shops for each of the principal occupations of the industry. For the cutters' occupation the differences in the fluctuations in both groups of shops are shown to be almost negligible, and the cutters' seasons in nonassociation shops follow very closely the seasons for the same kind of work in association shops. This statement holds equally true of the occupations of jacket and skirt upper pressers, and to a somewhat smaller degree, of the occupations of jacket under pressers and part pressers.

CHART 2.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 13 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS FOR ALL PRODUCTIVE LABOR, AUGUST, 1912, TO JULY, 1913.

[Average weekly pay roll for the year=100.]



With reference to the occupations of skirt under pressers and finishers (female), the seasonal fluctuations in association shops as compared with those in nonassociation shops seem to vary to a considerable degree. In these occupations the nonassociation shops represent somewhat more regular employment throughout the year, the seasonal peaks are not as high, and the falls of the pay roll during the slack periods not as marked as in shops belonging to members of the association.

TABLE 21.—FLUCTUATIONS OF EMPLOYMENT IN SPECIFIC OCCUPATIONS IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS AS SHOWN BY PERCENTAGES OF AVERAGE WEEKLY PAY ROLL, AUGUST, 1912, TO JULY, 1913.

Week No.	Cutters.		Jacket upper pressers.		Jacket under pressers.		Skirt upper pressers.		Skirt under pressers.		Part pressers.		Skirt finishers, female.	
	Association.	Nonassociation.	Association.	Nonassociation.	Association.	Nonassociation.	Association.	Nonassociation.	Association.	Nonassociation.	Association.	Nonassociation.	Association.	Nonassociation.
1	110.6	101	98.8	123	102.5	127	105.0	126	113.4	116	112.3	118	72.1	115
2	129.2	124	112.6	129	120.3	129	110.3	123	133.1	119	125.4	112	89.1	124
3	140.7	135	125.4	136	135.8	155	123.9	132	159.2	144	133.0	137	93.3	128
4	145.1	162	137.0	133	149.1	145	130.3	150	172.6	129	139.6	123	89.2	129
5	142.1	170	139.5	138	154.7	155	135.3	148	180.4	132	144.1	123	104.7	121
6	103.9	118	99.9	92	106.5	115	96.6	91	125.6	98	102.5	82	66.5	84
7	124.1	142	139.1	140	147.4	142	124.6	116	165.1	104	145.6	104	105.9	115
8	131.3	135	132.1	137	145.1	136	128.2	129	151.5	140	131.1	116	100.6	130
9	137.8	129	119.7	140	131.3	127	119.8	121	143.9	123	125.9	95	100.4	116
10	142.6	147	139.2	133	151.5	138	121.0	123	141.1	116	147.9	118	89.7	83
11	131.4	148	140.8	137	150.4	124	118.8	122	141.3	108	148.1	118	87.4	89
12	105.7	124	138.0	115	134.9	108	110.3	110	119.0	97	132.5	91	79.7	99
13	75.2	85	111.5	87	96.9	77	76.8	75	55.3	86	98.1	72	43.0	124
14	55.3	73	77.5	81	64.1	59	51.4	67	26.1	80	71.4	74	38.8	101
15	56.7	78	73.8	81	53.6	74	60.8	62	47.5	64	75.2	78	49.8	83
16	53.7	78	70.6	76	54.0	89	59.8	60	38.6	90	60.7	70	41.3	102
17	43.1	68	58.6	66	40.7	73	50.3	56	26.3	80	46.5	59	35.4	92
18	42.6	45	51.9	49	32.2	55	50.6	67	33.2	90	39.8	34	38.6	97
19	49.1	46	49.4	34	29.8	17	47.8	54	26.6	103	42.9	49	34.2	112
20	61.0	60	54.5	34	34.4	31	57.6	56	31.5	81	42.8	38	43.9	93
21	64.2	69	51.7	37	40.6	36	58.8	51	30.3	56	46.2	21	51.7	60
22	68.6	79	56.7	49	56.0	54	69.8	59	59.5	61	58.9	11	51.5	68
23	87.2	112	84.5	65	80.5	72	80.6	75	80.9	93	88.9	61	70.5	93
24	108.4	94	99.8	102	106.1	120	93.4	91	106.5	80	99.8	125	86.3	83
25	128.7	108	111.4	126	119.9	120	106.4	107	136.4	84	119.4	137	108.2	82
24	143.9	117	121.2	121	137.5	133	111.3	107	152.6	95	140.2	161	114.2	94
27	155.0	137	128.3	130	149.3	142	118.2	128	168.1	109	154.0	165	119.7	95
28	166.2	149	133.5	140	153.7	143	121.4	143	177.6	98	145.4	152	120.8	101
29	169.5	159	144.4	139	169.2	146	136.7	139	183.7	140	163.7	156	135.1	126
30	160.4	174	150.7	141	176.8	184	150.9	144	190.0	131	174.8	159	145.0	133
31	150.1	147	154.0	151	177.1	152	146.2	152	180.4	128	159.3	150	155.5	123
32	142.2	142	151.4	150	173.2	147	147.5	154	177.3	156	152.6	146	163.7	121
33	138.9	142	147.4	165	161.5	145	152.9	146	165.8	134	150.4	118	180.5	128
34	129.0	132	131.6	131	148.9	107	137.3	117	155.9	130	127.3	89	162.0	119
35	101.8	96	122.1	120	121.1	108	118.8	95	122.1	115	108.6	146	150.1	114
36	90.4	99	103.4	122	90.5	111	111.9	119	96.2	111	92.0	110	155.3	108
37	80.2	72	93.1	123	78.0	104	109.7	125	72.7	116	84.4	106	145.8	99
38	67.6	59	69.0	70	52.8	57	93.3	74	59.7	56	54.1	49	115.1	53
39	58.9	57	71.7	64	51.5	57	89.6	69	62.1	67	55.9	82	111.2	70
40	56.8	49	75.1	76	52.9	71	99.6	83	72.0	85	59.9	89	136.6	92
41	54.0	58	70.7	54	49.4	31	92.6	90	57.9	98	58.8	82	131.6	91
42	50.4	50	63.7	52	44.4	44	86.4	84	54.6	106	55.5	70	111.5	98
43	46.2	43	50.8	51	35.9	38	78.3	81	44.2	89	43.6	47	100.3	89
44	55.4	65	58.4	41	44.0	32	78.9	74	51.7	89	48.9	74	103.3	95
45	64.8	74	54.3	43	44.2	37	75.9	79	42.8	75	49.8	70	99.8	83
46	81.9	79	73.4	65	76.9	61	85.7	74	44.2	65	82.6	74	102.1	92
47	88.5	91	88.6	82	93.5	89	89.5	76	61.6	80	90.9	93	122.5	94
48	80.9	84	75.4	89	75.7	96	85.8	85	55.7	61	83.6	146	120.8	81
49	93.5	81	91.1	108	97.1	129	97.6	97	64.0	89	91.9	156	119.5	83
50	104.6	76	96.6	116	101.4	130	108.0	93	83.2	81	103.6	154	113.5	101
51	113.5	74	105.8	109	107.2	116	102.0	103	82.1	106	98.7	106	99.4	92
52	117.0	63	100.5	107	97.7	110	95.8	100	77.1	118	90.9	82	98.4	95

CHART 3.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—CUTTERS.

[Average weekly pay roll for the year = 100.]

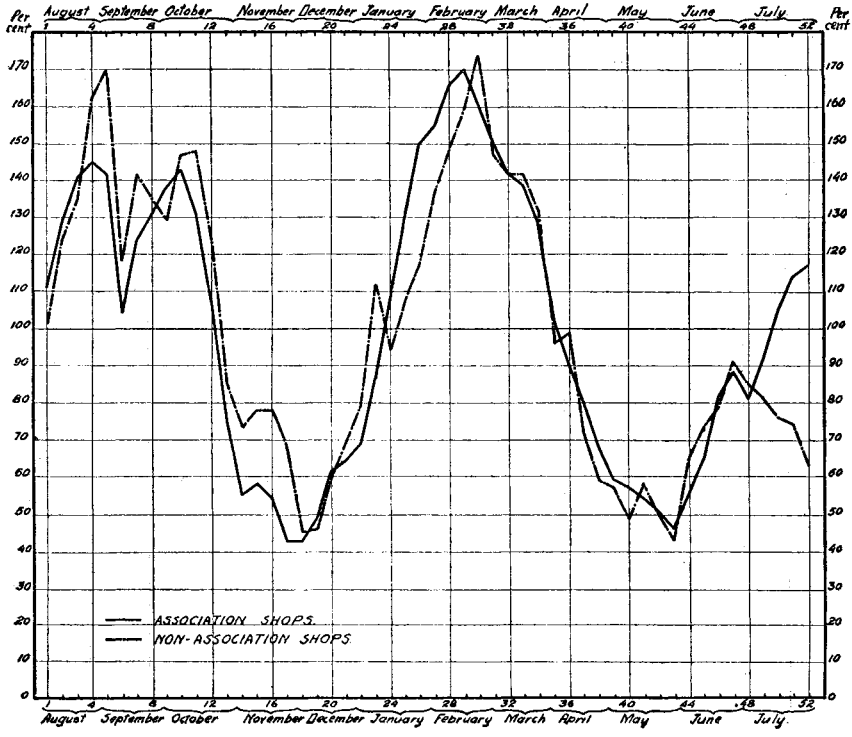


CHART 4.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—JACKET UPPER PRESSERS.

[Average weekly pay roll for the year=100.]

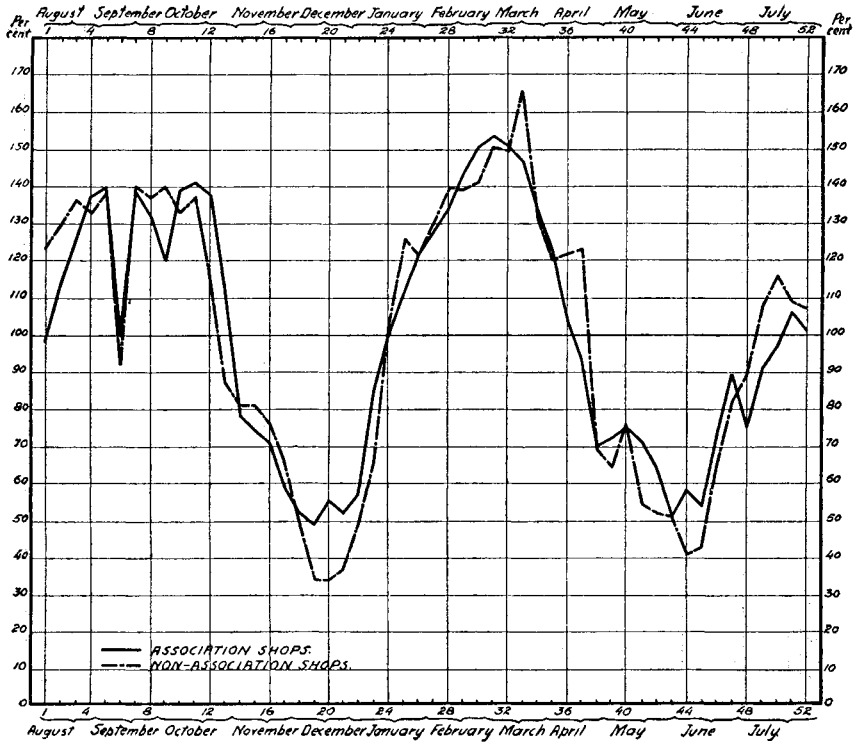


CHART 5.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—JACKET UNDER PRESSERS.

[Average weekly pay roll for the year=100.]

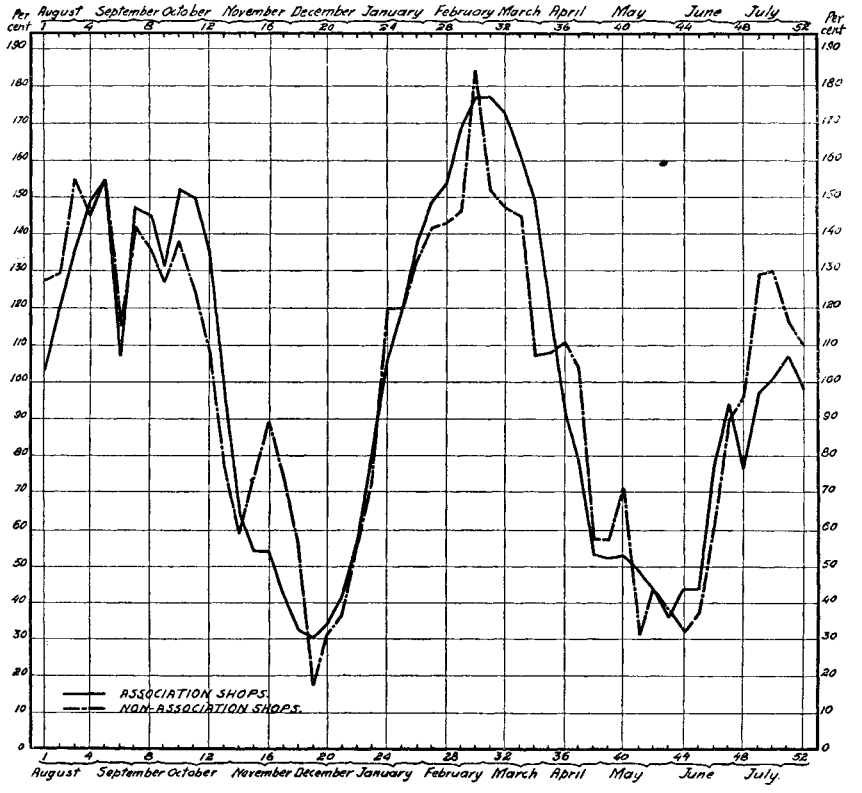


CHART 6.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—SKIRT UPPER PRESSERS.

[Average weekly pay roll for the year=100.]

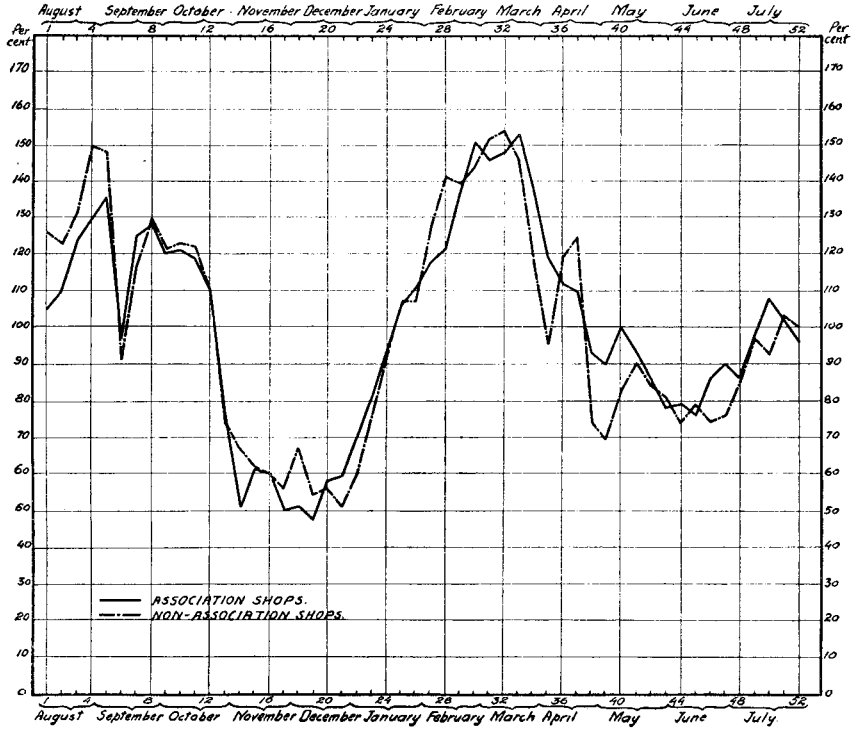


CHART 7.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—SKIRT UNDER PRESSERS.

[Average weekly pay roll for the year=100.]

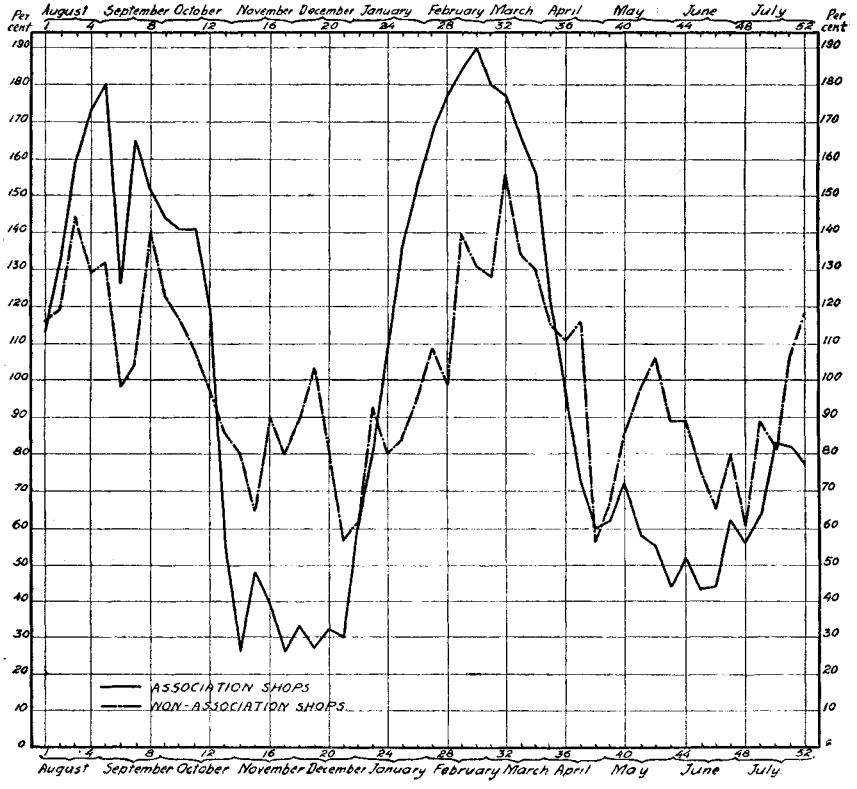


CHART 8.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—PART PRESSERS.

[Average weekly pay roll for the year=100.]

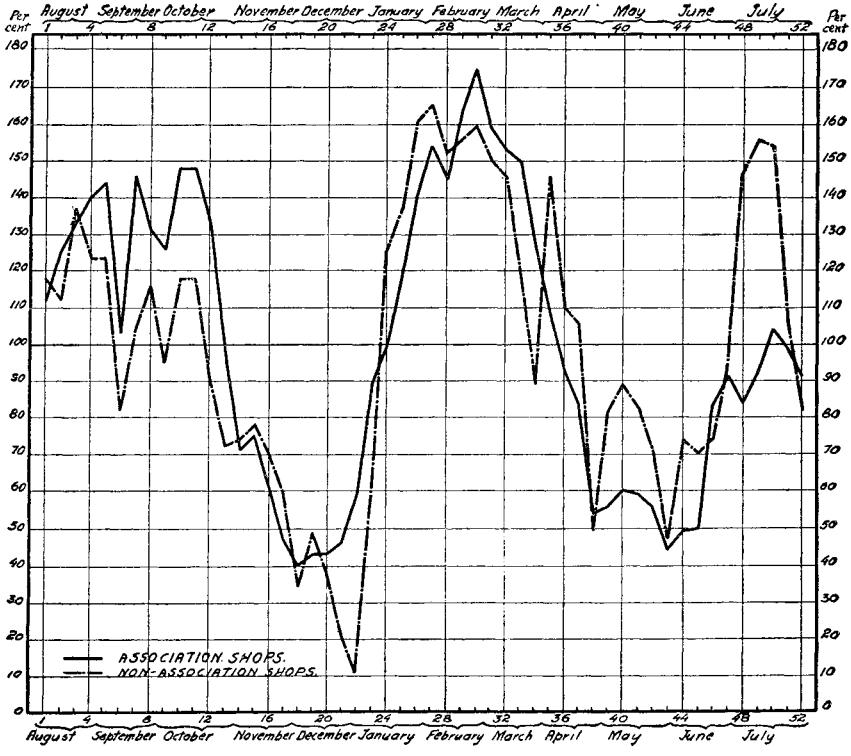
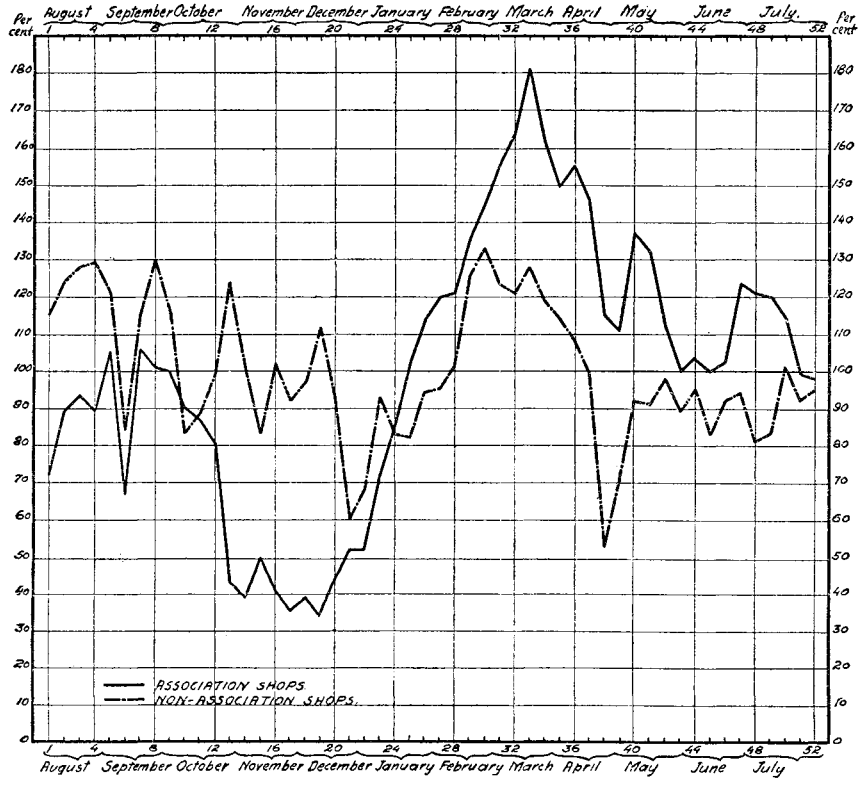


CHART 9.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS IN NEW YORK CITY, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—SKIRT FINISHERS, FEMALE.

[Average weekly pay roll for the year=100.]



The following table shows the percentage of employees in association and nonassociation shops who worked from 25 to 39 weeks and from 40 to 52 weeks as compared with the highest number employed at any season:

TABLE 22.—OPPORTUNITY FOR EMPLOYMENT IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS, AS SHOWN BY PERCENTAGE OF THE HIGHEST NUMBER EMPLOYED AT ANY TIME THAT WORKED EACH CLASSIFIED NUMBER OF WEEKS, AUGUST, 1912, TO JULY, 1913.

Occupation.	Per cent of highest number employed at any time who worked—			
	25 to 39 weeks.		40 to 52 weeks.	
	90 association shops.	13 nonassociation shops.	90 association shops.	13 nonassociation shops.
Cutters	69.9	58.0	43.8	43.2
Skirt cutters	60.0	80.0	48.0	60.0
Jacket upper pressers	84.9	86.4	72.6	70.5
Jacket under pressers	75.8	68.4	57.8	57.9
Skirt upper pressers	83.2	85.0	74.3	75.0
Skirt under pressers	74.5	81.8	46.8	81.8

The actual seasonal fluctuations of employment in association and nonassociation shops are graphically shown in charts. This table shows, in a rough way, the percentages of two groups of workers of the industry: (*a*) Workers "almost" permanently employed, who worked from 25 to 39 weeks, and (*b*) those classed as permanent workers of the industry, who worked between 40 and 52 weeks.

With reference to the latter group there is a marked difference between association and nonassociation shops in the case of skirt under pressers, the nonassociation shops having 81.8 per cent employed in this occupation more or less permanently as compared with 46.8 per cent in the association shops. Skirt cutters also show a considerable difference.

AVERAGE WEEKLY EARNINGS OF CUTTERS AND PRESSERS IN ASSOCIATION AND NONASSOCIATION SHOPS.

The following table gives a comparison of actual average weekly earnings of cutters and pressers in both classes of shops, as shown by the pay rolls:

TABLE 23.—COMPARISON OF ACTUAL AVERAGE WEEKLY EARNINGS OF CUTTERS AND PRESSERS IN 90 ASSOCIATION AND 13 NONASSOCIATION SHOPS, AUGUST, 1912, TO JULY, 1913.

Occupation.	Average weekly earnings in—	
	90 association shops.	13 nonassociation shops.
Cutters	$24.36	$23.59
Skirt cutters	20.96	20.41
Jacket upper pressers	17.65	16.60
Jacket under pressers	14.39	13.92
Skirt upper pressers	16.39	16.07
Skirt under pressers	13.26	12.40
Part pressers	12.26	12.11

As can readily be seen, the differences in actual weekly earnings of cutters and pressers in association and nonassociation shops are very small indeed.

WEEK WORKERS IN THE INDUSTRY IN BOSTON.

This study was undertaken by the Bureau of Labor Statistics at the formal request of representatives of the Boston Ladies' Garment Manufacturers' Association, operating under the protocol agreement of March 8, 1913.

Before making this request, officers of the association had visited New York City for the purpose of inquiring into the scope and methods of a similar investigation then being carried on by the board of arbitration of the New York cloak, suit, and skirt industry. Boston manufacturers were particularly anxious to ascertain actual earnings of workers in the shops of their association as well as the extent and precise nature of unemployment due to the seasonal character of the industry.

SCOPE OF THE INVESTIGATION AND METHODS EMPLOYED.

The objects of this study were: (*a*) To ascertain the earnings of the week workers, and (*b*) to determine the degree, precise nature, and specific dates of unemployment in the various occupations, due to the seasonal character of the industry.

The main purpose of this, as of similar studies published recently by this Bureau, was to show the possibilities for the regularization of employment in the garment trade through possible synchronization of the seasons in allied branches. If such possibilities could be established, ways might be devised whereby workers laid off in one branch of the needle trades could apply for employment in similar occupations in the allied branches.

Only week workers were covered by this study, for the following reasons: (1) In order to make results comparable with results obtained for similar occupations in the city of New York, and (2) because pieceworkers frequently work in teams or employ helpers whose names or separate earnings seldom appear on the pay-roll books of the employers.

Full information was obtained from about one-fourth of the total number of shops, comprising the 10 largest firms in the city. It is estimated that these 10 firms produce over one-third of the total output of cloaks, suits, and skirts in the city of Boston.

The information was gathered on two separate schedules: Schedule No. 1, an individual schedule, on which the earnings of each of the week workers for 52 consecutive weeks were recorded; and Schedule No. 2, an establishment schedule, on which the total expense for all productive labor—week workers as well as pieceworkers—for each firm for each week of the year were recorded. The latter was for the purpose of obtaining a graphic picture of the movement of the season and satisfactorily determining the exact proportion of work done on the week basis and by the piece.

Schedule No. 1, on which individual earnings were recorded, also called for information with reference to sex, specific occupation, and hours and days worked each week. As not all the shops could furnish reliable information as to the number of days worked each week, all tabulations showing extent of employment were based either upon the week or upon the hour as a unit. In every case an hour means a unit of actual work. A week, on the other hand, may mean anything from one hour to a full week. In other words, a week simply denotes that the individual appeared on the pay roll of the shop sometime during the week. A close examination of the schedules, however, shows that very few people ever worked less than one day—that, in fact, the majority of them worked full weeks.

The period covered by this investigation embraces a full year—August, 1912, to July, 1913. This period includes nearly five months during which the standards of wages and hours stipulated in the so-called protocol of peace of March 8, 1913, were in effect.

Thus this study, aside from its value for comparative purposes with reference to earnings of workers in identical occupations in the city of New York, affords some measurement of (*a*) the extent of unemployment due to the seasonal character of the industry, and (*b*) changes in the earnings of week workers following the signing of the collective agreement of March 8, 1913.

The data presented are based upon the records of earnings of over 400 week workers in the 10 largest establishments manufacturing cloaks, suits, and skirts in the city of Boston. These workers were employed at 23 specific occupations, of which only the 15 most important ones were tabulated and analyzed.

The number of shops investigated comprises one-fourth of the total number in the city of Boston. A careful estimate of the total working force of the cloak, suit, and skirt industry of that city puts it at about 3,000. Of these, on the basis of figures given elsewhere, 1,200 worked by the week. Thus, this study covers approximately one-third of the total number of week workers in the industry. The total annual amount of wages paid for all productive labor by the 10 firms investigated was $354,970, their total output, valued at about $1,000,000, being one-third of the total output of the industry.

Not all of the shops furnished complete information of earnings of week workers for each of the main occupations; the information obtained was as follows: For cutters, 10 shops; for pressers, 7 shops; for finishers, 8 shops. The defective records for pressers and finishers, in each instance, were found in three of the smallest shops investigated.[1]

Of all of the week workers for whom records of earnings were secured, tabulated, and analyzed (312 individuals) only one, or less than one-third of 1 per cent, worked in more than one of the shops investigated.

WAGES AND HOURS OF LABOR BEFORE AND AFTER SIGNING OF PROTOCOL.

No direct information of the actual differences in the earnings of the week workers before and after the signing of the protocol agreement could be obtained because of the fact that the specific number of hours worked each week, for both of the periods, could not in many cases be ascertained from the pay rolls. There was, however, a fairly reliable method for the determination of actual changes in wages due to the signing of the agreement, namely, a comparison of rates actually paid to workers in similar occupations before and after the agreement was signed. This comparison was made. Table 24 shows that in every occupation of week workers a considerable raise in wages immediately resulted. The average increase for all occupations was 11.7 per cent. In specific skilled occupations, excluding head cutters, increases varied from 8 per cent, the lowest, given to canvas cutters, to 23.4 per cent, the highest, granted to skirt under pressers.

In all the establishments visited the rates paid for overtime work were increased 50 per cent. Previous to the signing of the agreement none of the firms paid more than the regular rate for overtime.

The increase in average weekly rates for each specified occupation, and also for four groups of occupations after the protocol went into effect, is shown in the following table. The average weekly rates for the various occupations, before and after the protocol, were found in each instance by calculating the average of the lowest and highest rates paid each individual and dividing the total of these averages in each occupation by the total number of individuals in the occupation.

[1] The protocol specifies that most of the finishing departments be put on a piecework basis. There was a mutual understanding, however, that its introduction be somewhat gradual. At the time of the investigation, 8 of the 10 shops still had large parts of the finishing department on a weekly basis.

TABLE 24.—COMPARISON OF PREPROTOCOL AND POSTPROTOCOL WEEKLY RATES OF WAGES ACTUALLY PAID, IN 10 SHOPS AND 21 OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

[Data obtained from only 7 shops for pressers, and from 8 shops for finishers.]

Occupation.	Preprotocol.			Postprotocol.			Increase in average weekly rates.	
	Number of workers.	Range of weekly rates of wages.	Average weekly rate.	Number of workers.	Range of weekly rates of wages.	Average weekly rate.	Amount.	Per cent.
Head cutters	2	$23 to $27	$25.00	2	$23 to $28	$25.75	$0.75	3.0
Suit cutters	17	18 to 25	20.81	15	19 to 25	22.53	1.72	8.3
Skirt cutters	11	17 to 22	18.82	15	19.50 to 25	22.57	3.75	19.9
Trimming cutters	14	13 to 20	15.64	13	16 to 20	18.08	2.44	15.6
Canvas cutters	2	12 to 13	12.50	2	12 to 15	13.50	1.00	8.0
Apprentice cutters	10	5 to 10	7.40	6	5 to 12.50	8.25	.85	11.5
Head pressers	1	22	22.00	1	24	24.00	2.00	9.1
Jacket upper pressers	9	18 to 24	21.00	13	20.70 to 24	23.28	2.28	10.9
Jacket under pressers	9	13 to 19	16.06	13	16.10 to 20	18.33	2.27	14.2
Skirt upper pressers	11	16 to 21	17.95	19	19.50 to 22	20.48	2.53	14.1
Skirt under pressers	7	11 to 16	13.79	12	15 to 18.40	17.01	3.22	23.4
Part pressers	6	8 to 14	11.67	5	11.50 to 16	14.15	2.48	21.3
Jacket finishers, skilled	21	9 to 14	11.46	15	11 to 14	12.51	1.05	9.2
Skirt finishers, skilled	24	7 to 13	9.70	16	9 to 14	10.50	.80	8.2
Jacket finishers, unskilled	29	6 to 10	8.38	24	7.15 to 10	9.00	.62	7.4
Skirt finishers, unskilled	74	5 to 10	7.28	49	6 to 10	7.85	.57	7.8
Sample finishers	6	15 to 18	16.50	2	18	18.00	1.50	9.1
Basters	2	14 to 15	14.50	2	15 to 17	15.75	1.25	8.6
Cleaners	16	3.50 to 7	5.31	17	4 to 7	5.81	.50	9.4
Sample skirt makers	15	15 to 22	18.50	15	18 to 22	21.03	2.53	13.2
Sample jacket makers	9	16 to 22	19.53	8	20 to 24	22.21	2.68	13.7

AVERAGE INCREASE, BY GROUPS.

Cutters	11.0
Pressers	16.7
Finishers	8.5
Sample makers	13.4
All occupations	11.7

Prior to the signing of the agreement the 10 shops investigated had the following schedules of hours per week: 1 shop, 49 hours; 5 shops, 50 hours; 1 shop, 52 hours; 2 shops, 53 hours; and 1 shop, 54 hours. The agreement introduced a working week of uniform length—50 hours from September to May, and 49 hours from June to August. No statistical analysis of overtime hours worked before and after the protocol was signed is possible for the following reasons: (1) The agreement imposes no limitations upon the amount of overtime to be worked except that no overtime work can be done on Saturday, and (2) the actual overtime hours just previous to the signing of the agreement were abnormal and not representative of the industry under ordinary conditions. This was due to the fact that the manufacturers, having anticipated the coming general strike long in advance, worked their factories at top speed.

Generally speaking, no uniform rates of wages for specific occupations were in vogue previous to the introduction of collective bargaining. Bargaining was then on a purely individual basis. The protocol introduced minimum standard rates for eight of the principal occupations of week workers. The changes stipulated were to be introduced as follows: (*a*) In cases of workers whose former rates of wages were near the specified minimum standard, the stipulated minimum was to be granted immediately; (*b*) In cases of those whose

former rates of wages were far below the stipulated minimum, the mutual understanding was that the advancement to the minimum should be gradual—a 15 per cent increase was to be given immediately, the remainder, to reach the minimum, was to be granted in increases of 10 per cent each six months.

PROPORTION OF WEEK WORK IN THE LARGER SHOPS OF THE INDUSTRY.

As stated above, this report relates only to week workers. The proportion of week work in the shops investigated may be ascertained by comparing the total pay roll of the week workers, as indicated by the aggregate of the individual schedules of all week workers, with the total annual pay roll for all productive labor. As shown in Table 25 which follows, the per cent which the week workers' pay roll is of the total pay roll varies from a maximum of 50.3 in shop No. 1 to a minimum of 27.6 in shop No. 3, the average for all the shops being 39 per cent. As the seven shops upon the records of which this table is based were without doubt the largest establishments of their kind in Boston, this average may be considered as a fair indication of the average proportion of week work in the larger shops of that city.

TABLE 25.—PROPORTION OF WEEK WORK IN 7 LARGE SHOPS, AS SHOWN BY THE AMOUNTS OF MONEY ANNUALLY PAID OUT TO WEEK WORKERS AS COMPARED WITH AMOUNTS PAID OUT FOR ALL PRODUCTIVE LABOR, AUGUST, 1912, TO JULY, 1913.

Shop.	Total annual amount of pay roll for—		Per cent week workers' pay roll is of total pay roll.
	All productive labor.	All week workers.	
No. 1	$20,433	$10,279	50.3
No. 2	74,931	24,242	32.4
No. 3	50,684	14,011	27.6
No. 4	37,614	14,434	38.4
No. 5	37,997	18,750	49.3
No. 8	34,367	13,390	39.0
No. 10	37,992	13,645	35.9
Total	294,018	108,751	[1] 39.0

[1] The average per cent of week work in 32 shops in New York City is 25.2, the range in individual shops having been from 16.3 to 39. See page 15 of this Bulletin.

SEASONAL FLUCTUATIONS IN WEEKLY PAY ROLLS FOR ALL PRODUCTIVE LABOR AND FOR WEEK WORKERS ONLY.

In the following tables and the accompanying chart (No. 10) are shown for the 10 shops investigated the fluctuations from week to week in the pay rolls for all productive labor and in the aggregate amounts paid to week workers. These fluctuations are expressed by percentages which the totals paid in wages each week are of the average for the 52 weeks.

TABLE 26.—TOTAL WEEKLY AMOUNT OF PAY ROLL FOR ALL PRODUCTIVE LABOR IN 10 SHOPS, AND PER CENT OF AVERAGE WEEKLY AMOUNT AUGUST, 1912, TO JULY, 1913.

Month.	Week No.	Amount of pay roll.	Per cent of the average weekly pay roll.	Month.	Week No.	Amount of pay roll.	Per cent of the average weekly pay roll.
August	1	$8,161	119.6	February	27	$8,041	117.8
	2	7,943	116.4		28	8,438	123.6
	3	8,530	125.0		29	8,464	124.0
	4	8,168	119.7		30	8,704	127.5
September	5	7,507	110.0	March	31	5,987	87.7
	6	6,650	97.4		32	5,016	73.5
	7	8,111	118.8		33	9,526	139.5
	8	8,988	131.7		34	9,984	146.3
October	9	9,181	134.5	April	35	10,008	146.6
	10	8,563	125.4		36	9,896	145.0
	11	7,925	116.1		37	9,121	133.6
	12	7,240	106.1		38	7,664	112.3
November	13	6,734	98.6	May	39	7,747	113.5
	14	5,776	84.6		40	7,431	108.9
	15	4,481	65.6		41	6,973	102.1
	16	4,880	71.5		42	6,492	95.1
December	17	3,968	58.1	June	43	5,703	83.5
	18	4,414	64.7		44	5,402	79.1
	19	3,794	55.6		45	6,519	95.5
	20	4,137	60.6		46	5,377	78.8
January	21	3,886	56.9	July	47	6,536	95.7
	22	4,173	61.1		48	5,159	75.8
	23	5,000	73.2		49	4,315	63.2
	24	5,628	82.4		50	5,636	82.6
	25	6,360	93.2		51	6,013	88.1
	26	7,277	106.6		52	7,343	107.6
				Total		354,970	
				Average		6,826	100.0

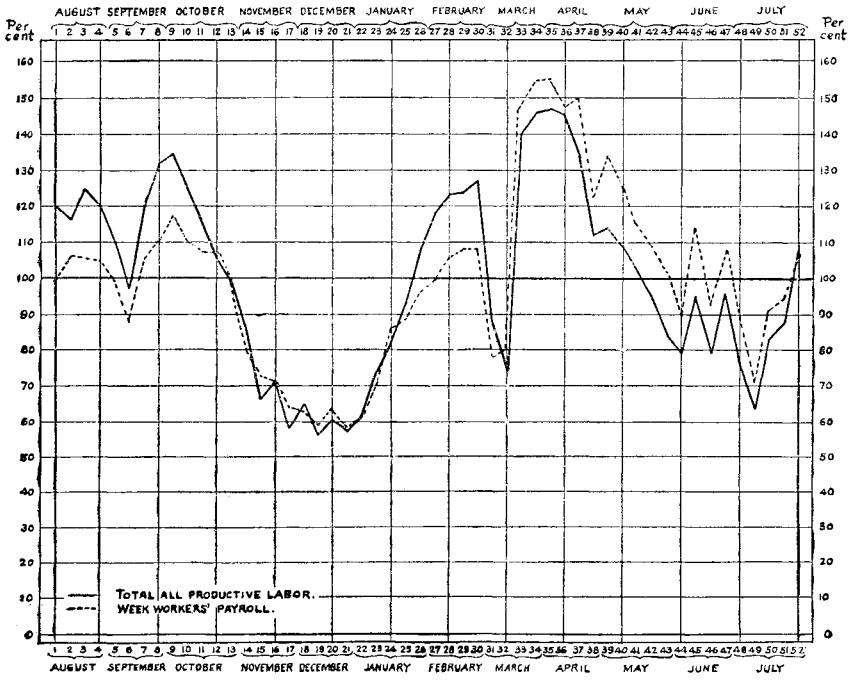
TABLE 27.—TOTAL WEEKLY AMOUNT OF PAY ROLL OF WEEK WORKERS, IN 7 SHOPS, AND PER CENT OF AVERAGE WEEKLY AMOUNT AUGUST, 1912, TO JULY, 1913.

Month.	Week No.	Number of employees.	Amount of pay roll.	Per cent of average weekly pay roll.	Month.	Week No.	Number of employees.	Amount of pay roll.	Per cent of average weekly pay roll.
August	1	165	$1,865	99.5	February	27	158	$1,872	99.9
	2	170	1,985	105.9		28	164	1,978	105.5
	3	172	1,986	106.0		29	168	2,028	108.2
	4	172	1,976	105.4		30	171	2,028	108.2
September	5	171	1,852	98.8	March	31	168	1,460	77.9
	6	171	1,656	88.4		32	176	1,496	79.8
	7	174	1,971	105.2		33	197	2,758	147.2
	8	172	2,064	110.1		34	203	2,911	155.3
October	9	176	2,202	117.5	April	35	201	2,924	156.0
	10	169	2,071	110.5		36	191	2,765	147.5
	11	171	2,026	108.1		37	198	2,833	151.2
	12	167	2,006	107.0		38	186	2,308	123.2
November	13	166	1,854	98.9	May	39	184	2,507	133.8
	14	152	1,544	82.4		40	180	2,358	125.8
	15	140	1,367	72.9		41	172	2,174	116.0
	16	134	1,325	70.7		42	171	2,067	110.3
December	17	127	1,202	64.1	June	43	166	1,914	102.1
	18	122	1,183	63.1		44	168	1,680	89.6
	19	117	1,113	59.4		45	170	2,136	114.0
	20	113	1,177	62.8		46	163	1,751	93.4
January	21	110	1,082	57.7	July	47	160	2,019	107.7
	22	109	1,135	60.6		48	159	1,655	88.3
	23	124	1,327	70.8		49	124	1,333	71.1
	24	146	1,620	86.4		50	135	1,708	91.1
	25	148	1,665	88.8		51	140	1,755	93.6
	26	155	1,796	95.8		52	155	1,981	105.7
					Total		8,341	97,449	
					Average		160.4	1,874	100.0

There are in this industry four main seasonal periods. As shown in Table 26 and Chart 10 the first busy season for the industry at large begins about the last week of the month of July and lasts approximately about 12 weeks. This is followed by a relatively short dull season, from the last week in October to the fourth week in January. Then the spring season, the busiest one of all, arrives. It lasts for over three months, till about the third week in May. The second slack season, lasting for about 10 weeks, then ensues.

CHART 10.—SEASONAL FLUCTUATIONS OF EMPLOYMENT AS SHOWN BY WEEKLY PAY ROLLS FOR ALL PRODUCTIVE LABOR IN 10 SHOPS AND FOR WEEK WORKERS IN 7 SHOPS, BOSTON, AUGUST, 1912, TO JULY, 1913.

[Average weekly pay roll for the year = 100.]



The busiest week was the first week in April; 146.6 per cent of the average pay roll was paid out to the workers during that week. The dullest week was the second in December; only 55.6 per cent of the average pay roll.[1]

In the week-work part of the industry the general trend of these fluctuations is substantially the same as for the industry at large, though, as a matter of fact, the specific high and low points do not exactly coincide.

[1] The sudden falls of the pay rolls of both groups in weeks 31–32 are abnormal; they are due entirely to the general strike which took place during these weeks just before the signing of the so-called protocol of peace of March 8, 1913.

That the movement as shown by the curve for the industry at large is substantially correct can be seen by comparing it with the curve showing the seasonal fluctuations for the week-work part of the industry. Both curves, though varying slightly in fluctuations of minor importance, are surprisingly alike.

FLUCTUATIONS IN EMPLOYMENT AND EARNINGS IN ASSOCIATION SHOPS, BY OCCUPATIONS.

In Table 28, which follows, is given for the 15 principal occupations in 10 association shops of the cloak, suit, and skirt industry of Boston the number of employees from week to week during the year from August, 1912, to July, 1913, as shown by the pay rolls, together with their total and average earnings each week and for the year. Columns are also given showing the fluctuations in the number of employees and in the pay roll from week to week, expressed in percentages that these items are of the averages for the year. This table corresponds to Table 4, showing similar information for New York City.

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

[Data obtained from 10 shops for cutters; from 7 shops for pressers; from 8 shops for finishers.]

CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average = 100 per cent).	Per cent of average weekly pay roll in each week (average = 100 per cent).
August	1	13	$272	$20.92	111.0	112.4	February	27	12	$265	$22.08	102.5	109.5
	2	13	268	20.62	111.0	110.7		28	13	265	20.38	111.0	109.5
	3	13	275	21.15	111.0	113.6		29	12	257	21.42	102.5	106.2
	4	13	276	21.23	111.0	114.0		30	12	248	20.67	102.5	102.5
September	5	14	287	20.50	119.5	118.6	March	31	12	194	16.17	102.5	80.2
	6	14	277	19.79	119.5	114.5		32	12	222	18.50	102.5	91.7
	7	14	304	21.71	119.5	125.6		33	12	299	24.92	102.5	123.5
	8	14	302	21.57	119.5	124.8		34	12	283	23.58	102.5	116.9
	9	14	320	22.86	119.5	132.2		35	12	288	24.00	102.5	119.0
October	10	14	314	22.43	119.5	129.7	April	36	13	300	23.08	111.0	124.0
	11	14	303	21.64	119.5	125.2		37	13	302	23.23	111.0	124.8
	12	14	297	21.21	119.5	122.7		38	12	249	20.75	102.5	102.9
	13	13	263	20.23	111.0	108.7		39	12	258	21.50	102.5	106.6
November	14	12	226	18.83	102.5	93.4	May	40	10	224	22.40	85.4	92.6
	15	11	211	19.18	93.9	87.2		41	10	220	22.00	85.4	90.9
	16	13	225	17.31	111.0	93.0		42	10	216	21.60	85.4	89.2
	17	11	203	18.45	93.9	83.9		43	11	203	18.45	93.9	83.9
December	18	11	191	17.36	93.9	78.9	June	44	11	200	18.18	93.9	82.6
	19	9	180	20.00	76.8	74.4		45	11	238	21.64	93.9	98.3
	20	10	207	20.70	85.4	85.5		46	11	215	19.55	93.9	88.8
	21	9	169	18.78	76.8	69.8		47	11	223	20.27	93.9	92.1
January	22	10	183	18.30	85.4	75.6	July	48	9	160	17.78	76.8	66.1
	23	10	196	19.60	85.4	81.0		49	8	152	19.00	68.3	62.8
	24	12	229	19.08	102.5	94.6		50	9	171	19.00	76.8	70.7
	25	11	229	20.82	93.9	94.6		51	11	241	21.91	93.9	99.6
	26	12	257	21.42	102.5	106.2		52	10	232	23.20	85.4	95.9
							Total			12,589			
							Average		11.7	242.09	20.67	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	6	$96	$16.00	88.1	73.5	February	27	8	$153	$19.13	117.5	117.1
	2	6	113	18.83	88.1	86.5		28	8	155	19.38	117.5	118.6
	3	5	90	18.00	73.4	68.9		29	8	156	19.50	117.5	119.4
	4	5	90	18.00	73.4	68.9		30	8	155	19.38	117.5	118.6
September	5	5	90	18.00	73.4	68.9	March	31	8	146	18.25	117.5	111.7
	6	5	90	18.00	73.4	68.9		32	8	99	12.38	117.5	75.8
	7	5	90	18.00	73.4	68.9		33	8	176	22.00	117.5	134.7
	8	5	90	18.00	73.4	68.9		34	8	176	22.00	117.5	134.7
October	9	5	90	18.00	73.4	68.9	April	35	8	173	21.63	117.5	132.4
	10	5	90	18.00	73.4	68.9		36	8	172	21.50	117.5	131.6
	11	5	90	18.00	73.4	68.9		37	8	177	22.13	117.5	135.4
	12	5	90	18.00	73.4	68.9		38	8	151	18.88	117.5	115.5
	13	5	90	18.00	73.4	68.9		39	8	163	20.38	117.5	124.7
November	14	5	90	18.00	73.4	68.9	May	40	8	168	21.00	117.5	128.5
	15	5	90	18.00	73.4	68.9		41	7	150	21.43	102.8	114.8
	16	5	90	18.00	73.4	68.9		42	9	184	20.44	132.2	140.8
	17	5	90	18.00	73.4	68.9		43	8	165	20.63	117.5	126.3
December	18	5	90	18.00	73.4	68.9	June	44	9	157	17.44	132.2	120.1
	19	5	90	18.00	73.4	68.9		45	8	176	22.00	117.5	134.7
	20	5	90	18.00	73.4	68.9		46	8	148	18.50	117.5	113.2
	21	5	90	18.00	73.4	68.9		47	8	183	22.88	117.5	140 0
January	22	7	103	14.71	102.8	78.8	July	48	9	165	18.33	132.2	126.3
	23	5	90	18.00	73.4	68.9		49	8	147	18.38	117.5	112.5
	24	5	90	18.00	73.4	68.9		50	9	208	23.11	132.2	159.2
	25	7	109	15.57	102.8	83.4		51	9	193	21.44	132.2	147.7
	26	9	171	19.00	132.2	130.8		52	10	218	21.80	146.9	166.8
							Total			6,796			
							Average		6.8	130.69	19.20	100.0	100.0

TRIMMING CUTTERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	11	$172	$15.64	101.8	99.1	February	27	12	$198	$16.50	111.0	114.1
	2	11	170	15.45	101.8	98.0		28	12	196	16.33	111.0	112.9
	3	10	157	15.70	92.5	90.5		29	12	189	15.75	111.0	108.9
	4	10	159	15.90	92.5	91.6		30	12	191	15.92	111.0	110.0
September	5	10	157	15.70	92.5	90.5	March	31	12	157	13.08	111.0	90.5
	6	10	159	15.90	92.5	91.6		32	11	143	13.00	101.8	82.4
	7	11	175	15.91	101.8	100.8		33	13	252	19.38	120.3	145.2
	8	10	161	16.10	92.5	92.8		34	13	244	18.77	120.3	140.6
October	9	11	180	16.36	101.8	103.7	April	35	13	242	18.62	120.3	139.4
	10	10	163	16.30	92.5	93.9		36	13	241	18.54	120.3	138.9
	11	10	162	16.20	92.5	93.3		37	12	214	17.83	111.0	123.3
	12	10	159	15.90	92.5	91.6		38	13	204	15.69	120.3	117.5
	13	10	156	15.60	92.5	89.9		39	12	202	16.83	111.0	116.4
November	14	10	146	14.60	92.5	84.1	May	40	12	196	16.33	111.0	112.9
	15	9	134	14.89	83.3	77.2		41	12	206	17.17	111.0	118.7
	16	9	133	14.78	83.3	76.6		42	11	179	16.27	101.8	103.1
	17	8	118	14.75	74.0	68.0		43	10	161	16.10	92.5	92.8
December	18	8	112	14.00	74.0	64.5	June	44	12	180	15.00	111.0	103.7
	19	8	118	14.75	74.0	68.0		45	12	207	17.25	111.0	119.3
	20	9	135	15.00	83.3	77.8		46	11	161	14.64	101.8	92.8
	21	9	135	15.00	83.3	77.8		47	11	188	17.09	101.8	108.3
January	22	10	154	15.40	92.5	88.7	July	48	11	173	15.73	101.8	99.7
	23	10	158	15.80	92.5	91.0		49	10	155	15.50	92.5	89.3
	24	11	171	15.55	101.8	98.5		50	11	189	17.18	101.8	108.9
	25	10	157	15.70	92.5	90.5		51	11	191	17.36	101.8	110.0
	26	12	188	15.67	111.0	108.3		52	11	177	16.09	101.8	102.0
							Total			9,025			
							Average		10.8	173.56	16.05	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

JACKET UPPER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	7	$156	$22.29	89.0	99.4	February	27	2	$49	$24.50	25.4	31.2
	2	7	163	23.29	89.0	103.9		28	3	81	27.00	38.1	51.6
	3	7	166	23.71	89.0	105.8		29	3	70	23.33	38.1	44.6
	4	7	173	24.71	89.0	110 3		30	3	68	22.67	38.1	43.3
September	5	8	181	22.63	101.7	115.4		31	3	41	13.67	38.1	26.1
	6	8	146	18.25	101.7	93.1	March	32	6	72	12.00	76.3	45.9
	7	8	196	24.50	101.7	124.9		33	12	309	25.75	152.6	197.0
	8	8	196	24.50	101.7	121.9		34	13	365	28.08	165.3	232.7
October	9	8	206	25.75	101.7	131.3		35	13	380	29.23	165.3	242.2
	10	8	221	27.63	101.7	140.9	April	36	12	343	28.58	152.6	218.7
	11	8	220	27.50	101.7	140.2		37	13	347	26.69	165.3	221.2
	12	8	199	24.88	101.7	126.9		38	13	273	21.00	165.3	174.0
	13	8	184	23.00	101.7	117.3		39	13	291	22.38	165.3	185.5
November	14	8	145	18.13	101.7	92.4		40	13	266	20.46	165.3	169.6
	15	8	104	13.00	101.7	66.3	May	41	12	195	16.25	152.6	124.3
	16	7	92	13.14	89.0	58.6		42	12	200	16.67	152.6	127.5
	17	4	58	14.50	50.9	37.0		43	12	191	15.92	152.6	121.8
December	18	5	72	14.40	63.6	45.9		44	12	143	11.92	152.6	91.2
	19	3	35	11.67	38.1	22.3	June	45	12	218	18.17	152.6	139.0
	20	4	50	12.50	50.9	31.9		46	11	179	16.27	139.9	114.1
	21	2	32	16.00	25.4	20.4		47	12	196	16.33	152.6	124.9
January	22	3	30	10.00	38.1	19.1		48	11	127	11.55	139.9	81.0
	23	3	40	13.33	38.1	25.5	July	49	9	95	10.56	114.4	60.6
	24	3	64	21.33	38.1	40.8		50	9	124	13.78	114.4	79.0
	25	3	61	20.33	38.1	38.9		51	10	117	11.70	127.1	74.6
	26	2	44	22.00	25.4	28.0		52	10	183	18.30	127.1	116.7
							Total	.....	.....	8,157	.....	.....	.....
							Average	.....	7.9	156.87	19.94	100.0	100.0

JACKET UNDER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	7	$117	$16.71	85.2	90.5	February	27	5	$96	$19.20	60.9	74.3
	2	7	126	18.00	85.2	97.5		28	5	93	18.60	60.9	72.0
	3	7	117	16.71	85.2	90.5		29	5	96	19.20	60.9	74.3
	4	7	117	16.71	85.2	90.5		30	5	96	19.20	60.9	74.3
September	5	7	126	18.00	85.2	97.5		31	5	56	11.20	60.9	43.3
	6	7	100	14.29	85.2	77.4	March	32	6	78	13.00	73.1	60.4
	7	7	139	19.86	85.2	107.6		33	11	242	22.00	134.0	187.3
	8	7	138	19.71	85.2	106.8		34	12	271	22.58	146.1	209.7
	9	7	144	20.57	85.2	111.4		35	12	276	23.00	146.1	213.6
October	10	7	139	19.86	85.2	107.6	April	36	13	287	22.08	158.3	222.1
	11	7	138	19.71	85.2	106.8		37	13	272	20.92	158.3	210.5
	12	7	125	17.86	85.2	96.7		38	12	215	17.92	146.1	166.4
	13	8	128	16.00	97.4	99.0		39	13	256	19.69	158.3	198.1
November	14	7	92	13.14	85.2	71.2		40	13	218	16.77	158.3	168.7
	15	5	67	13.40	60.9	51.8	May	41	13	194	14.92	158.3	150.1
	16	5	66	13.20	60.9	51.1		42	13	170	13.08	158.3	131.5
	17	6	70	11.67	73.1	54.2		43	13	148	11.38	158.3	114.5
December	18	4	49	12.25	48.7	37.9		44	13	116	8.92	158.3	89.8
	19	4	49	12.25	48.7	37.9	June	45	13	162	12.46	158.3	125.4
	20	4	46	11.50	48.7	35.6		46	13	132	10.15	158.3	102.1
	21	3	44	14.67	36.5	34.0		47	13	165	12.69	158.3	127.7
January	22	4	48	12.00	48.7	37.1		48	13	134	10.31	158.3	103.7
	23	4	52	13.00	48.7	40.2		49	10	87	8.70	121.8	67.3
	24	4	69	17.25	48.7	53.4	July	50	9	112	12.44	109.6	86.7
	25	4	76	19.00	48.7	58.8		51	10	108	10.80	121.8	83.6
	26	5	91	18.20	60.9	70.4		52	13	167	12.85	158.3	129.2
							Total	.....	.....	6,720	.....	.....	.....
							Average	.....	8.2	129.23	15.74	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT UPPER PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	9	$150	$16.67	84.0	81.7	Febr u-ary	27	6	$115	$19.17	56.0	62.7
	2	9	165	18.33	84.0	89.9		28	6	116	19.33	56.0	63.2
	3	9	167	18.56	84.0	91.0		29	6	118	19.67	56.0	64.3
	4	9	158	17.56	84.0	86.1		30	6	115	19.17	56.0	62.7
September	5	9	143	15.89	84.0	77.9		31	6	89	14.83	56.0	48.5
	6	9	127	14.11	84.0	69.2	March	32	12	135	11.25	112.0	73.6
	7	9	133	14.78	84.0	72.5		33	14	257	18.36	130.7	140.0
	8	9	156	17.33	84.0	85.0		34	14	280	20.00	130.7	152.6
October	9	9	161	17.89	84.0	87.7		35	14	279	19.93	130.7	152.0
	10	9	136	15.11	84.0	74.1	April	36	14	266	19.00	130.7	144.9
	11	9	124	13.78	84.0	67.6		37	15	305	20.33	140.0	166.2
	12	9	151	16.78	84.0	82.3		38	15	248	16.53	140.0	135.1
	13	9	149	16.56	84.0	81.2		39	15	296	19.73	140.0	161.3
November	14	8	113	14.13	74.7	61.6		40	15	283	18.87	140.0	154.2
	15	8	114	14.25	74.7	62.1	May	41	15	291	19.40	140.0	158.5
	16	7	103	14.71	65.4	56.1		42	15	261	17.40	140.0	142.2
	17	9	126	14.00	84.0	68.7		43	14	250	17.86	130.7	136.2
December	18	9	132	14.67	84.0	71.9		44	15	226	15.07	140.0	123.1
	19	8	106	13.25	74.7	57.8	June	45	16	288	18.00	149.4	156.9
	20	8	114	14.25	74.7	62.1		46	16	249	15.56	149.4	135.7
	21	7	99	14.14	65.4	53.9		47	16	307	19.19	149.4	167.3
January	22	6	93	15.50	56.0	50.7		48	16	269	16.81	149.4	146.6
	23	7	112	16.00	65.4	61.0		49	15	233	15.53	140.0	126.9
	24	7	123	17.57	65.4	67.0	July	50	15	287	19.13	140.0	156.4
	25	7	124	17.71	65.4	67.6		51	16	294	18.38	149.4	160.2
	26	6	103	17.17	56.0	56.1		52	16	305	19.06	149.4	166.2
							Total	.....	.....	9,544	.....	.....	.....
							Average	.....	10.7	183.54	17.13	100.0	100.0

SKIRT UNDER PRESSERS.

August	1	3	$33	$11.00	56.3	48.0	Febr u-ary	27	5	$71	$14.20	93.9	103.3
	2	3	37	12.33	56.3	53.8		28	5	71	14.20	93.9	103.3
	3	2	25	12.50	37.5	36.4		29	5	77	15.40	93.9	112.1
	4	2	26	13.00	37.5	37.8		30	5	77	15.40	93.9	112.1
September	5	2	20	10.00	37.5	29.1		31	5	46	9.20	93.9	66.9
	6	3	31	10.33	56.3	45.1	March	32	8	82	10.25	150.2	119.3
	7	3	37	12.33	56.3	53.8		33	10	161	16.10	187.7	234.3
	8	2	26	13.00	37.5	37.8		34	11	171	15.55	206.5	248.9
October	9	2	26	13.00	37.5	37.8		35	11	166	15.09	206.5	241.6
	10	2	15	7.50	37.5	21.8	April	36	9	142	15.78	169.0	206.7
	11	2	13	6.50	37.5	18.9		37	9	154	17.11	169.0	224.1
	12	2	21	10.50	37.5	30.6		38	9	127	14.11	169.0	184.8
	13	2	24	12.00	37.5	34.9		39	9	145	16.11	169.0	211.0
November	14	2	16	8.00	37.5	23.3		40	9	133	14.78	169.0	193.6
	15	2	17	8.50	37.5	24.7	May	41	9	124	13.78	169.0	180.5
	16	2	11	5.50	37.5	16.0		42	9	115	12.78	169.0	167.4
	17	2	21	10.50	37.5	30.6		43	8	119	14.88	150.2	173.2
December	18	2	21	10.50	37.5	30.6		44	9	102	11.33	169.0	148.4
	19	2	12	6.00	37.5	17.5	June	45	9	128	14.22	169.0	186.3
	20	2	17	8.50	37.5	24.7		46	9	97	10.78	169.0	141.2
	21	2	26	13.00	37.5	37.8		47	9	115	12.78	169.0	167.4
	22	2	27	13.50	37.5	39.3		48	9	87	9.67	169.0	126.6
	23	.....	.....	.....	.....	.....		49	8	81	10.13	150.2	117.9
January	24	5	46	9.20	93.9	66.9	July	50	8	100	12.50	150.2	145.5
	25	5	71	14.20	93.9	103.3		51	9	91	10.11	169.0	132.4
	26	5	70	14.00	93.9	101.9		52	8	102	12.75	150.2	148.4
							Total	.....	.....	3,573	.....	.....	.....
							Average	.....	5.3	68.71	12.90	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

PART PRESSERS.

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	4	$55	$13.75	99.0	122.1	February	27	2	$28	$14.00	49.5	62.2
	2	4	49	12.25	99.0	108.8		28	2	30	15.00	49.5	66.6
	3	4	51	12.75	99.0	113.2		29	2	28	14.00	49.5	62.2
	4	4	41	10.25	99.0	91.0		30	2	27	13.50	49.5	59.9
September	5	4	40	10.00	99.0	88.8	March	31	2	20	10.00	49.5	44.4
	6	4	48	12.00	99.0	106.6		32	5	41	8.20	123.8	91.0
	7	5	50	10.00	123.8	111.0		33	4	56	14.00	99.0	124.3
	8	6	54	9.00	148.6	119.9		34	4	57	14.25	99.0	126.6
October	9	6	73	12.17	148.6	162.1	April	35	4	58	14.50	99.0	128.8
	10	6	73	12.17	148.6	162.1		36	4	58	14.50	99.0	128.8
	11	6	67	11.17	148.6	148.8		37	4	59	14.75	99.0	131.0
	12	6	70	11.67	148.6	155.4		38	4	54	13.50	99.0	119.9
November	13	6	64	10.67	148.6	142.1	May	39	4	55	13.75	99.0	122.1
	14	5	56	11.20	123.8	124.3		40	4	57	14.25	99.0	126.6
	15	5	42	8.40	123.8	93.3		41	4	48	12.00	99.0	106.6
	16	5	43	8.60	123.8	95.5		42	4	46	11.50	99.0	102.1
	17	4	35	8.75	99.0	77.7		43	4	40	10.00	99.0	88.8
December	18	5	36	7.20	123.8	79.9	June	44	4	32	8.00	99.0	71.1
	19	5	43	8.60	123.8	95.5		45	4	36	9.00	99.0	79.9
	20	5	49	9.80	123.8	108.8		46	4	33	8.25	99.0	73.3
	21	4	36	9.00	99.0	79.9		47	4	42	10.50	99.0	93.3
January	22	3	25	8.33	74.3	55.5	July	48	4	41	10.25	99.0	91.0
	23	3	27	9.00	74.3	59.9		49	4	43	10.75	99.0	95.5
	24	2	19	9.50	49.5	42.2		50	4	54	13.50	99.0	119.9
	25	2	22	11.00	49.5	48.8		51	4	54	13.50	99.0	119.9
	26	2	24	12.00	49.5	53.3		52	4	53	13.25	99.0	117.7
							Total			2,342			
							Average		4.0	45.04	11.15	100.0	100.0

JACKET FINISHERS B2 (MALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	3	$30	$10.00	98.7	82.2	February	27	3	$39	$13.00	98.7	106.9
	2	4	42	10.50	131.6	115.1		28	3	41	13.67	98.7	112.4
	3	4	44	11.00	131.6	120.6		29	3	40	13.33	98.7	109.6
	4	4	43	10.75	131.6	117.9		30	3	44	14.67	98.7	120.6
September	5	4	31	7.75	131.6	84.8	March	31	3	29	9.67	98.7	79.5
	6	4	36	9.00	131.6	98.7		32	3	27	9.00	98.7	74.0
	7	5	57	11.40	164.6	156.2		33	4	53	13.25	131.6	145.3
	8	5	62	12.40	164.6	170.0		34	4	70	17.50	131.6	191.9
October	9	5	68	13.60	164.6	186.4	April	35	4	69	17.25	131.6	189.
	10	5	63	12.60	164.6	172.7		36	4	66	16.50	131.6	180.9
	11	4	51	12.75	131.6	139.8		37	4	65	16.25	131.6	178.2
	12	4	51	12.75	131.6	139.8		38	4	50	12.50	131.6	137.1
November	13	4	47	11.75	131.6	128.8	May	39	4	47	11.75	131.6	128.8
	14	3	29	9.67	98.7	79.5		40	3	34	11.33	98.7	93.2
	15	3	28	9.33	98.7	76.8		41	2	25	12.50	65.8	68.5
	16	3	26	8.67	98.7	71.3		42	3	29	9.67	98.7	79.5
	17	2	20	10.00	65.8	54.8		43	2	25	12.50	65.8	68.5
December	18	2	22	11.00	65.8	60.3	June	44	2	20	10.00	65.8	54.8
	19	2	22	11.00	65.8	60.3		45	2	25	12.50	65.8	68.5
	20	2	22	11.00	65.8	60.3		46	2	23	11.50	65.8	63.0
	21	2	18	9.00	65.8	49.3		47	2	25	12.50	65.8	68.5
January	22	2	22	11.00	65.8	60.3	July	48	2	25	12.50	65.8	68.5
	23	2	25	12.50	65.8	68.5		49	2	17	8.50	65.8	46.6
	24	2	25	12.50	65.8	68.5		50	2	25	12.50	65.8	68.5
	25	2	25	12.50	65.8	68.5		51	2	25	12.50	65.8	68.5
	26	2	25	12.50	65.8	68.5		52	2	25	12.50	65.8	68.5
							Total			1,897			
							Average		3.0	36.48	12.01	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT FINISHERS A1 (MALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	2	$13	$6.50	72.7	68.6	February	27	3	$20	$6.67	109.1	105.6
	2	2	14	7.00	72.7	73.9		28	3	20	6.67	109.1	105.6
	3	3	21	7.00	109.1	110.9		29	4	28	7.00	145.5	147.8
	4	3	23	7.67	109.1	121.4		30	6	44	7.33	218.2	232.3
	5	3	20	6.67	109.1	105.6		31	6	31	5.17	218.2	163.7
September	6	2	9	4.50	72.7	47.5	March	32	6	33	5.50	218.2	174.2
	7	2	14	7.00	72.7	73.9		33	5	46	9.20	181.8	242.8
	8	2	18	9.00	72.7	95.0		34	5	49	9.80	181.8	258.7
	9	2	19	9.50	72.7	100.3		35	5	49	9.80	181.8	258.7
October	10	2	16	8.00	72.7	84.5	April	36	5	50	10.00	181.8	264.0
	11	2	17	8.50	72.7	89.7		37	5	41	8.20	181.8	216.4
	12	2	18	9.00	72.7	95.0		38	4	27	6.75	145.5	142.5
	13	2	13	6.50	72.7	68.6		39	3	26	8.67	103.1	137.3
November	14	2	15	7.50	72.7	79.2		40	3	21	7.00	109.1	110.9
	15	2	11	5.50	72.7	58.1	May	41	3	15	5.00	109.1	79.2
	16	2	7	3.50	72.7	37.0		42	2	13	6.50	72.7	68.6
	17	2	9	4.50	72.7	47.5		43	2	14	7.00	72.7	73.9
December	18	2	9	4.50	72.7	47.5	June	44	2	6	3.00	72.7	31.7
	19	1	7	7.00	36.4	37.0		45	2	17	8.50	72.7	89.7
	20	2	8	4.00	72.7	42.2		46	2	8	4.00	72.7	42.2
	21	1	6	6.00	36.4	31.7		47	2	12	6.00	72.7	63.4
January	22	2	8	4.00	72.7	42.2		48	2	13	6.50	72.7	68.6
	23	3	20	6.67	109.1	105.6		49	.....	.....	.....	.....	.....
	24	4	28	7.00	145.5	147.8	July	50	1	2	2.00	36.4	10.6
	25	4	27	6.75	145.5	142.5		51	1	1	1.00	36.4	5.3
	26	4	26	6.50	145.5	137.3		52	1	3	3.00	36.4	15.8
							Total	.....	.....	985	.....	.....	.....
							Average	.....	2.8	18.94	6.89	100.0	100.0

SKIRT FINISHERS A1 (FEMALE).

August	1	39	$254	$6.51	125.4	127.8	February	27	36	$266	$7.39	115.8	133.8
	2	41	286	6.98	131.8	143.9		28	37	282	7.62	119.0	141.8
	3	40	285	7.13	128.6	143.4		29	39	308	7.90	125.4	154.9
	4	39	265	6.79	125.4	133.3		30	42	315	7.50	135.1	158.4
	5	36	214	5.94	115.8	107.6		31	40	219	5.48	128.6	110.2
September	6	34	168	4.94	109.3	84.5	March	32	32	132	4.13	102.9	66.4
	7	34	202	5.94	109.3	101.6		33	35	265	7.57	112.6	133.3
	8	34	241	7.09	109.3	121.2		34	37	293	7.92	119.0	147.4
	9	37	258	6.97	119.0	129.8		35	35	277	7.91	112.6	139.3
October	10	35	241	6.89	112.6	121.2	April	36	31	236	7.61	99.7	118.7
	11	36	226	6.28	115.8	113.7		37	36	274	7.61	115.8	137.8
	12	38	261	6.87	122.2	131.3		38	30	197	6.57	96.5	99.1
	13	37	228	6.16	119.0	114.7		39	29	202	6.97	93.3	101.6
November	14	34	183	5.38	109.3	92.0	May	40	30	208	6.93	96.5	104.6
	15	33	170	5.15	106.1	85.5		41	25	170	6.80	80.4	85.5
	16	30	163	5.43	96.5	82.0		42	26	169	6.50	83.6	85.0
	17	28	123	4.39	90.0	61.9		43	25	149	5.96	80.4	74.9
December	18	25	115	4.60	80.4	57.8		44	25	125	5.00	80.4	62.9
	19	28	125	4.46	90.0	62.9	June	45	25	166	6.64	80.4	83.5
	20	26	154	5.92	83.6	77.5		46	24	138	5.75	77.2	69.4
	21	25	127	5.08	80.4	63.9		47	23	143	6.22	74.0	71.9
January	22	20	110	5.50	64.3	55.3		48	22	97	4.41	70.7	48.8
	23	26	170	6.54	83.6	85.5		49	17	76	4.47	54.7	38.2
	24	34	237	6.97	109.3	119.2	July	50	19	108	5.68	61.1	54.3
	25	34	238	7.00	109.3	119.7		51	18	111	6.17	57.9	55.8
	26	34	233	6.85	109.3	117.2		52	22	135	6.14	70.7	67.9
							Total	.....	.....	10,338	.....	.....	.....
							Average	.....	31.1	198.81	6.39	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT FINISHERS A2 (FEMALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	14	$124	$8.86	113.0	107.9	February	27	14	$142	$10.14	113.0	123.6
	2	14	125	8.93	113.0	108.8		28	15	146	9.73	121.1	127.0
	3	14	135	9.64	113.0	117.5		29	16	155	9.69	129.2	134.9
	4	15	148	9.87	121.1	128.8		30	16	163	10.19	129.2	141.8
September	5	16	132	8.25	129.2	114.9		31	16	122	7.63	129.2	106.2
	6	15	100	6.67	121.1	87.0	March	32	16	120	7.50	129.2	104.4
	7	15	130	8.67	121.1	113.1		33	15	148	9.87	121.1	128.8
	8	15	138	9.20	121.1	120.1		34	15	146	9.73	121.1	127.0
	9	16	151	9.44	129.2	131.4		35	13	124	9.54	105.0	107.9
October	10	14	120	8.57	113.0	104.4	April	36	9	91	10.11	72.7	79.2
	11	15	130	8.67	121.1	113.1		37	13	136	10.46	105.0	118.3
	12	14	129	9.21	113.0	112.2		38	9	88	9.78	72.7	76.6
	13	13	111	8.54	105.0	96.6		39	9	95	10.56	72.7	82.7
	14	13	103	7.92	105.0	89.6		40	9	94	10.44	72.7	81.8
November	15	12	106	8.83	96.9	92.2	May	41	9	97	10.78	72.7	84.4
	16	11	98	8.91	88.8	85.3		42	9	98	10.89	72.7	85.3
	17	13	111	8.54	105.0	96.6		43	9	94	10.44	72.7	81.8
	18	13	106	8.15	105.0	92.2		44	9	90	10.00	72.7	78.3
December	19	12	111	9.25	96.9	96.6	June	45	10	110	11.00	80.7	95.7
	20	12	106	8.83	96.9	92.2		46	10	100	10.00	80.7	87.0
	21	12	98	8.17	96.9	85.3		47	9	95	10.56	72.7	82.7
	22	12	105	8.75	96.9	91.4		48	10	95	9.50	80.7	82.7
	23	11	106	9.64	88.8	92.2		49	9	88	9.78	72.7	76.6
January	24	13	122	9.38	105.0	106.2	July	50	8	74	9.25	64.6	64.4
	25	13	122	9.38	105.0	106.2		51	7	73	10.43	56.5	63.5
	26	15	145	9.67	121.1	126.2		52	8	80	10.00	64.6	69.6
							Total			5,976			
							Average		12.4	114.92	9.28	100.0	100.0

JACKET FINISHERS B1 (FEMALE).

August	1	23	$183	$7.96	119.4	127.3	February	27	22	$184	$8.36	114.2	128.0
	2	23	195	8.48	119.4	135.6		28	22	186	8.45	114.2	129.4
	3	24	187	7.79	124.6	130.1		29	22	196	8.91	114.2	136.3
	4	24	204	8.50	124.6	141.9		30	22	187	8.50	114.2	130.1
September	5	24	178	7.42	124.6	123.8		31	22	119	5.41	114.2	82.8
	6	25	130	5.20	129.7	90.4	March	32	22	137	6.23	114.2	95.3
	7	27	185	6.85	140.1	128.7		33	23	206	8.96	119.4	143.3
	8	25	217	8.68	129.7	150.9		34	23	207	9.00	119.4	144.0
	9	26	230	8.85	134.9	160.0		35	23	211	9.17	119.4	146.7
October	10	25	220	8.80	129.7	153.0	April	36	23	208	9.04	119.4	144.7
	11	25	214	8.56	129.7	148.8		37	22	191	8.68	114.2	132.8
	12	21	180	8.57	109.0	125.2		38	23	179	7.78	119.4	124.5
	13	21	142	6.76	109.0	98.8		39	21	174	8.29	109.0	121.0
November	14	17	100	5.88	88.2	69.5		40	21	166	7.90	109.0	115.4
	15	16	93	5.81	83.0	64.7	May	41	21	181	8.62	109.0	125.9
	16	14	97	6.93	72.7	67.5		42	21	158	7.52	109.0	109.9
	17	11	56	5.09	57.1	38.9		43	19	110	5.79	98.6	76.5
	18	11	59	5.36	57.1	41.0		44	19	109	5.74	98.6	75.8
December	19	9	44	4.89	46.7	30.6	June	45	19	129	6.79	98.6	89.7
	20	8	47	5.88	41.5	32.7		46	17	89	5.24	88.2	61.9
	21	9	47	5.22	46.7	32.7		47	16	119	7.44	83.0	82.8
	22	11	65	5.91	57.1	45.2		48	12	61	5.08	62.3	42.4
January	23	17	108	6.35	88.2	75.1		49	10	58	5.80	51.9	40.3
	24	18	128	7.11	93.4	89.0	July	50	13	82	6.31	67.5	57.0
	25	20	149	7.45	103.8	103.6		51	13	85	6.54	67.5	59.1
	26	21	182	8.67	109.0	126.6		52	16	105	6.56	83.0	73.0
							Total			7,477			
							Average		19.3	143.79	7.46	100.0	100.0

TABLE 28.—NUMBER OF EMPLOYEES AND THEIR EARNINGS EACH WEEK AND PER CENT OF THE RESPECTIVE WEEKLY AVERAGES FOR THE YEAR, IN ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Concluded.

JACKET FINISHERS B2 (FEMALE).

Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).	Month.	Week No.	Number of employees.	Total weekly pay roll.	Average weekly earnings.	Per cent of average number of employees in each week (average=100 per cent).	Per cent of average weekly pay roll in each week (average=100 per cent).
August	1	10	$108	$10.80	97.0	95.3	February	27	11	$132	$12.00	106.7	116.5
	2	10	112	11.20	97.0	98.8		28	11	132	12.00	106.7	116.5
	3	12	132	11.00	116.4	116.5		29	11	141	12.82	106.7	124.4
	4	12	139	11.58	116.4	122.7		30	11	139	12.64	106.7	122.7
September	5	13	132	10.15	126.1	116.5	March	31	11	86	7.82	106.7	75.9
	6	14	108	7.71	135.8	95.3		32	11	90	8.18	106.7	79.4
	7	13	137	10.54	126.1	120.9		33	11	143	13.00	106.7	126.2
	8	13	141	10.85	126.1	124.4		34	11	153	13.91	106.7	135.0
	9	12	156	13.00	116.4	137.7		35	11	157	14.27	106.7	138.6
October	10	11	145	13.18	106.7	128.0	April	36	11	148	13.45	106.7	130.6
	11	12	157	13.08	116.4	138.6		37	11	149	13.55	106.7	131.5
	12	11	131	11.91	106.7	115.6		38	11	123	11.18	106.7	108.6
	13	12	132	11.00	116.4	116.5		39	11	138	12.55	106.7	121.8
November	14	11	116	10.55	106.7	102.4		40	11	130	11.82	106.7	114.7
	15	11	111	10.09	106.7	98.0	May	41	11	112	10.18	106.7	98.8
	16	11	116	10.55	106.7	102.4		42	11	112	10.18	106.7	98.8
	17	11	98	8.91	106.7	86.5		43	11	102	9.27	106.7	90.0
December	18	10	111	11.10	97.0	98.0		44	11	88	8.00	106.7	77.7
	19	9	89	9.89	87.3	78.5	June	45	10	103	10.30	97.0	90.9
	20	7	82	11.71	67.9	72.4		46	7	71	10.14	67.9	62.7
	21	9	77	8.56	87.3	68.0		47	7	64	9.14	67.9	56.5
January	22	9	91	10.11	87.3	80.0		48	7	56	8.00	67.9	49.4
	23	12	131	10.92	116.4	115.6		49	3	22	7.33	29.1	19.4
	24	12	144	12.00	116.4	127.1	July	50	3	31	10.33	29.1	27.4
	25	12	142	11.83	116.4	125.3		51	4	37	9.25	38.8	32.7
	26	12	137	11.42	116.4	120.9		52	6	58	9.67	58.2	51.2
							Total			5,892			
							Average		10.3	113.31	10.99	100.0	100.0

CLEANERS (FEMALE).

August	1	5	$24	$4.80	57.6	58.0	February	27	10	$50	$5.00	115.3	120.9
	2	6	33	5.50	69.2	79.8		28	10	55	5.50	115.3	133.0
	3	6	33	5.50	69.2	79.8		29	10	56	5.60	115.3	135.4
	4	8	35	4.38	92.2	84.7		30	10	56	5.60	115.3	135.4
September	5	7	34	4.86	80.7	82.2	March	31	10	46	4.60	115.3	111.3
	6	7	31	4.43	80.7	75.0		32	10	29	2.90	115.3	70.1
	7	7	32	4.57	80.7	77.4		33	12	64	5.33	138.4	154.8
	8	8	43	5.38	92.2	104.0		34	13	71	5.46	149.9	171.7
	9	8	52	6.50	92.2	125.8		35	14	85	6.07	161.4	205.6
October	10	8	51	6.38	92.2	123.3	April	36	14	81	5.79	161.4	195.9
	11	8	46	5.75	92.2	111.3		37	13	73	5.62	149.9	176.6
	12	8	48	6.00	92.2	116.1		38	13	66	5.08	149.9	159.6
	13	9	47	5.22	103.8	113.7		39	13	66	5.08	149.9	159.6
November	14	8	26	3.25	92.2	62.9		40	12	68	5.67	138.4	164.5
	15	4	9	2.25	46.1	21.8	May	41	12	65	5.42	138.4	157.2
	16	5	19	3.80	57.6	46.0		42	10	51	5.10	115.3	123.3
	17	6	21	3.50	69.2	50.8		43	10	47	4.70	115.3	113.7
December	18	6	28	4.67	69.2	67.7	June	44	9	28	3.11	103.8	67.7
	19	6	26	4.33	69.2	62.9		45	11	48	4.36	126.8	116.1
	20	5	20	4.00	57.6	48.4		46	11	36	3.27	126.8	87.1
	21	6	22	3.67	69.2	53.2		47	10	40	4.00	115.3	96.7
January	22	6	29	4.83	69.2	70.1		48	10	28	2.80	115.3	67.7
	23	7	33	4.71	80.7	79.8	July	49	3	7	2.33	34.6	16.9
	24	8	42	5.25	92.2	101.6		50	8	21	2.63	92.2	50.8
	25	8	40	5.00	92.2	96.7		51	6	17	2.83	69.2	41.1
	26	8	43	5.38	92.2	104.0		52	9	29	3.22	103.8	70.1
							Total			2,150			
							Average		8.7	41.35	4.77	100.0	100.0

For purposes of graphic representation of the extent of employment, as shown in the above table, only the principal occupations were selected. Whenever possible, substantially similar occupations were combined into one "principal" one. Thus, we have only one chart for cutters, which combined suit, skirt, and trimming cutters, and one for jacket and skirt upper pressers combined. The jacket and skirt under pressers could not be combined for two reasons: (*a*) The minor fluctuations of each were too widely different to permit averaging, and (*b*) no skirt under pressers appeared on any of the pay rolls during the second week in January. This fact is not surprising because, although skirt under pressers were found in a majority of the shops investigated, the bulk of the workers in this occupation were found working in one establishment, a firm manufacturing skirts exclusively. As the work in the establishment of this firm is highly specialized and greatly subdivided, it might well have happened that no under pressing of skirts was done during the second week in January.

The figures upon which the charts (Nos. 11 to 16) showing seasonal fluctuations of employment in the principal occupations are based are given in Table 29, which follows. The fluctuations are expressed in terms of percentages that the specific amount expended during each of the weeks of the year constitutes with reference to the pay roll for the specific occupation during the average week of the year; that is, the total pay roll for the year for each occupation was divided by 52, the resultant being considered 100 per cent. All of the amounts of specific weeks of the year were then reduced to a percentage of this unit. Thus, the movement of employment with reference to a more or less normal representative point of the year was obtained.

In any discussion or examination of the charts which are intended to show seasonal fluctuations of employment one fact must be borne in mind in order to be subsequently discounted, viz, the occurrence of a general strike in the industry in Boston during the early part of March, 1913. As the manufacturers anticipated the approaching crisis it is apparent that they worked their establishments at top speed just prior to March of that year. For this reason the curves of employment show rather early activity during the spring season of the year under investigation. For the same reason, the length of the spring season appears to be somewhat greater than usual. It may be safely asserted that, had the strike not taken place, each of the curves would have appeared somewhat less violent in its fluctuations during weeks 25 to 40, or from the fourth week in January to the second in May. Taken as a whole, however, it is believed that though the strike might have affected the minor fluctuations, it affected very little the general tendencies of the movement of the

season of the industry. As brought out in many other connections in this study, and as shown graphically in the charts, the general seasonal fluctuations of the cloak, suit, and skirt industry in Boston, where the strike occurred, are surprisingly like those in the same industry in New York City, where no strike took place.

TABLE 29.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN PRINCIPAL OCCUPATIONS IN ASSOCIATION SHOPS, AS SHOWN BY PER CENT THAT THE AMOUNT OF PAY ROLL EACH WEEK IS OF THE AVERAGE WEEKLY AMOUNT FOR THE YEAR, AUGUST, 1912, TO JULY, 1913.

[In this table cutters represent a combination of suit, skirt, and trimming cutters (10 shops); upper pressers a combination of jacket and skirt upper pressers (7 shops); and skilled finishers, female, a combination of skirt finishers A2, and jacket finishers B2 (8 shops).]

Month.	Week No.	Cutters.	Upper pressers.	Jacket under pressers.	Part pressers.	Finishers, skilled.	
						Male.	Female.
August	1	98.8	89.9	90.5	122.1	82.2	101.7
	2	100.9	96.4	97.5	108.8	115.1	103.8
	3	95.5	97.8	90.5	113.2	120.6	117.0
	4	96.1	97.2	90.5	91.0	117.9	125.8
September	5	97.7	95.2	97.5	88.8	84.8	115.7
	6	96.3	80.2	77.4	106.6	98.7	91.1
	7	104.1	96.6	107.6	111.0	156.2	117.0
	8	101.2	103.4	106.8	119.9	170.0	122.2
October	9	108.0	107.8	111.4	162.1	186.4	134.5
	10	103.8	104.9	107.6	162.1	172.7	116.1
	11	101.6	101.1	106.8	148.8	139.8	125.8
	12	99.9	102.8	96.7	155.4	139.8	113.9
	13	93.2	97.8	99.0	142.1	128.8	106.5
November	14	84.6	75.8	71.2	124.3	79.5	96.0
	15	79.6	64.0	51.8	93.3	76.8	95.1
	16	82.0	57.3	51.1	95.5	71.3	93.8
	17	75.2	54.1	54.2	77.7	54.8	91.6
December	18	71.9	59.9	37.9	79.9	60.3	95.1
	19	71.0	41.4	37.9	95.5	60.3	87.6
	20	79.1	48.2	35.6	108.8	60.3	82.4
	21	72.1	38.5	34.0	79.9	49.3	76.7
January	22	80.5	36.1	37.1	55.5	60.3	85.9
	23	81.3	44.7	40.2	59.9	68.5	103.8
	24	89.7	54.9	53.4	42.2	68.5	116.5
	25	90.6	54.3	58.8	48.8	68.5	115.7
	26	112.7	43.2	70.4	53.3	68.5	123.6
	27	112.7	48.2	74.3	62.2	106.9	120.1
February	28	112.7	57.9	72.0	66.6	112.4	121.8
	29	110.2	55.2	74.3	62.2	109.6	129.7
	30	108.7	53.8	74.3	59.9	120.6	132.3
	31	91.0	38.2	43.3	44.4	79.5	91.1
March	32	84.9	60.8	60.4	91.0	74.0	92.0
	33	133.1	166.3	187.3	124.3	145.3	127.5
	34	128.7	189.5	209.7	126.6	191.9	131.0
	35	128.7	193.6	213.6	128.8	189.1	123.1
April	36	130.5	178.9	222.1	128.8	180.9	104.7
	37	126.8	191.5	210.5	131.0	178.2	124.9
	38	110.6	153.1	166.4	119.9	137.1	92.5
	39	114.0	172.4	198.1	122.1	128.8	102.1
May	40	107.6	161.3	168.7	126.6	93.2	98.1
	41	105.4	142.8	150.1	106.6	68.5	91.6
	42	106.0	135.4	131.5	102.1	79.5	92.0
	43	96.8	129.6	114.5	88.8	68.5	85.9
June	44	98.3	108.4	89.8	71.1	54.8	78.0
	45	113.7	148.6	125.4	79.9	68.5	93.3
	46	95.9	125.7	102.1	73.3	63.0	74.9
	47	108.7	147.8	127.7	93.3	68.5	69.7
July	48	91.2	116.3	103.7	91.0	68.5	66.2
	49	83.1	96.4	67.3	95.5	46.6	48.2
	50	104.0	120.7	86.7	119.9	68.5	46.0
	51	114.4	120.7	83.6	119.9	68.5	48.2
	52	114.8	143.4	129.2	117.7	68.5	60.5

CHART 11.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 10 ASSOCIATION SHOPS IN BOSTON, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—CUTTERS.

[Average weekly pay roll for the year = 100.]

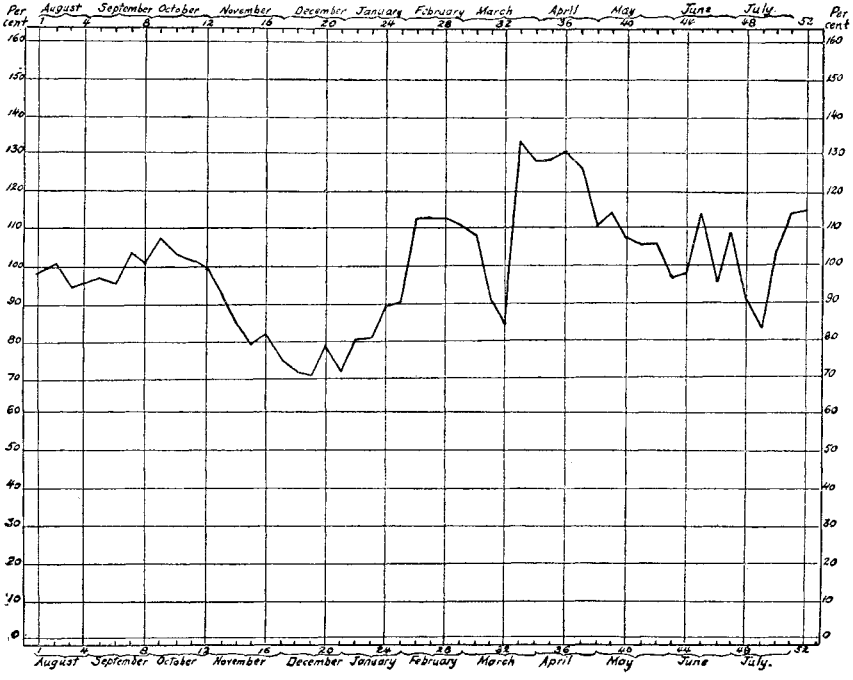


CHART 12.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 7 ASSOCIATION SHOPS IN BOSTON, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—UPPER PRESSERS.

[Average weekly pay roll for the year=100.]

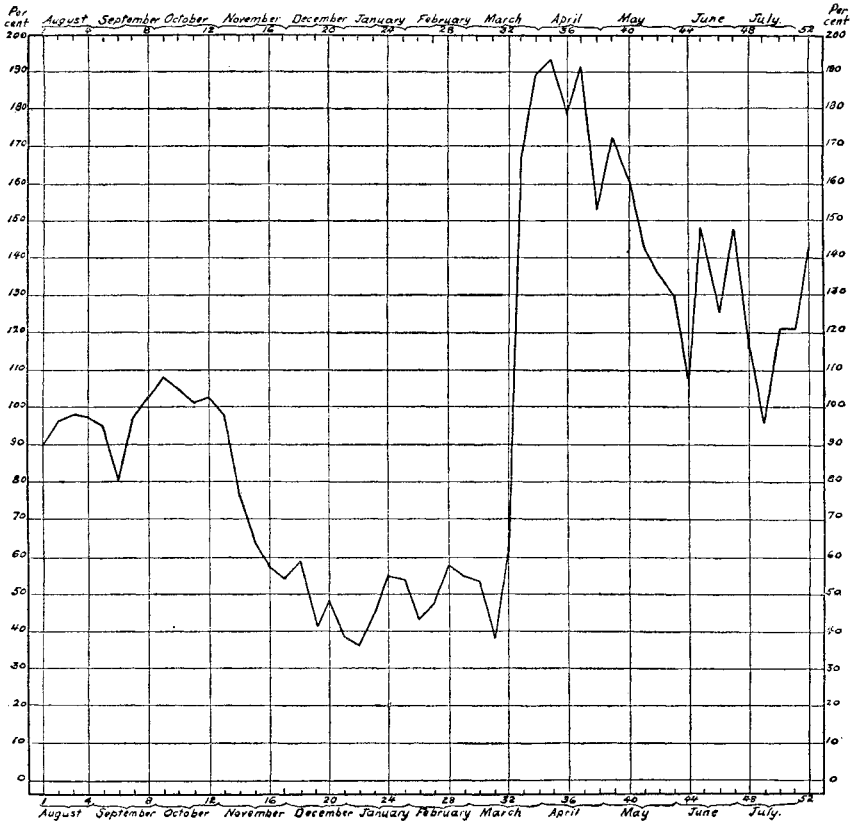


CHART 13.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 7 ASSOCIATION SHOPS IN BOSTON, AS SHOWN BY WEEKLY PAY ROLLS. AUGUST, 1912, TO JULY, 1913—JACKET UNDER PRESSERS.

[Average weekly pay roll for the year = 100.]

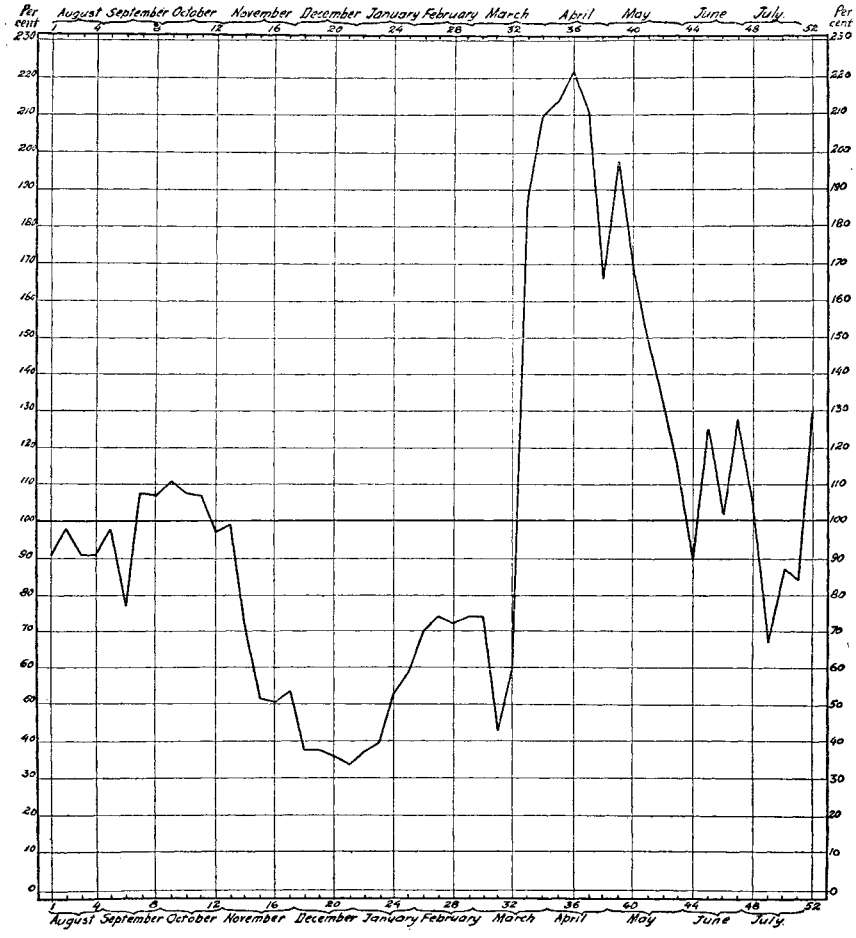


CHART 14.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 7 ASSOCIATION SHOPS IN BOSTON, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—PART PRESSERS.

[Average weekly pay roll for the year=100.]

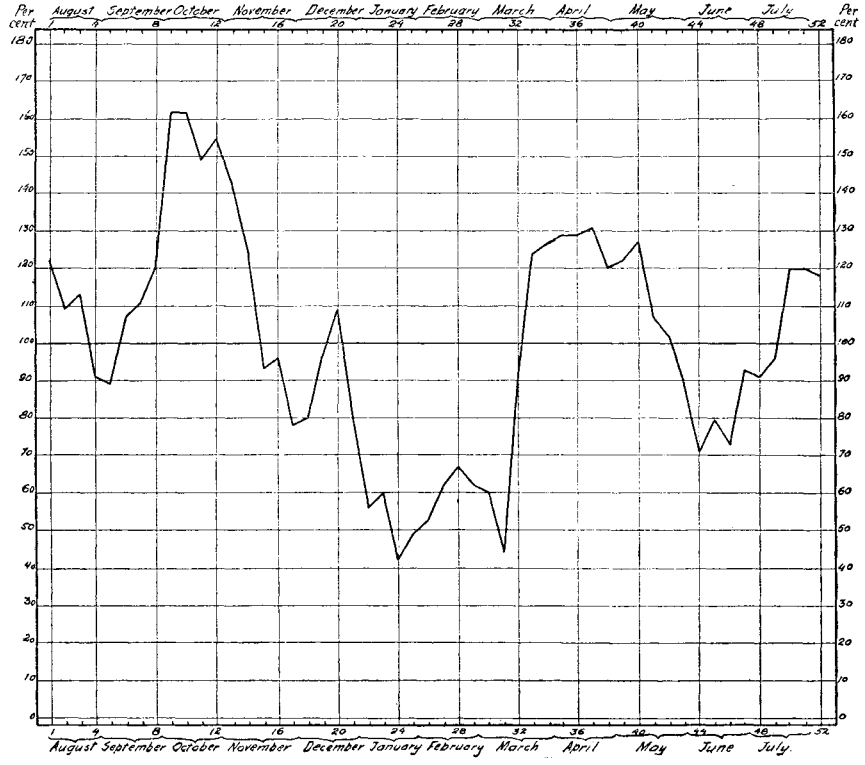


CHART 15.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 8 ASSOCIATION SHOPS IN BOSTON, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—FINISHERS, SKILLED, MALE.

[Average weekly pay roll for the year=100.]

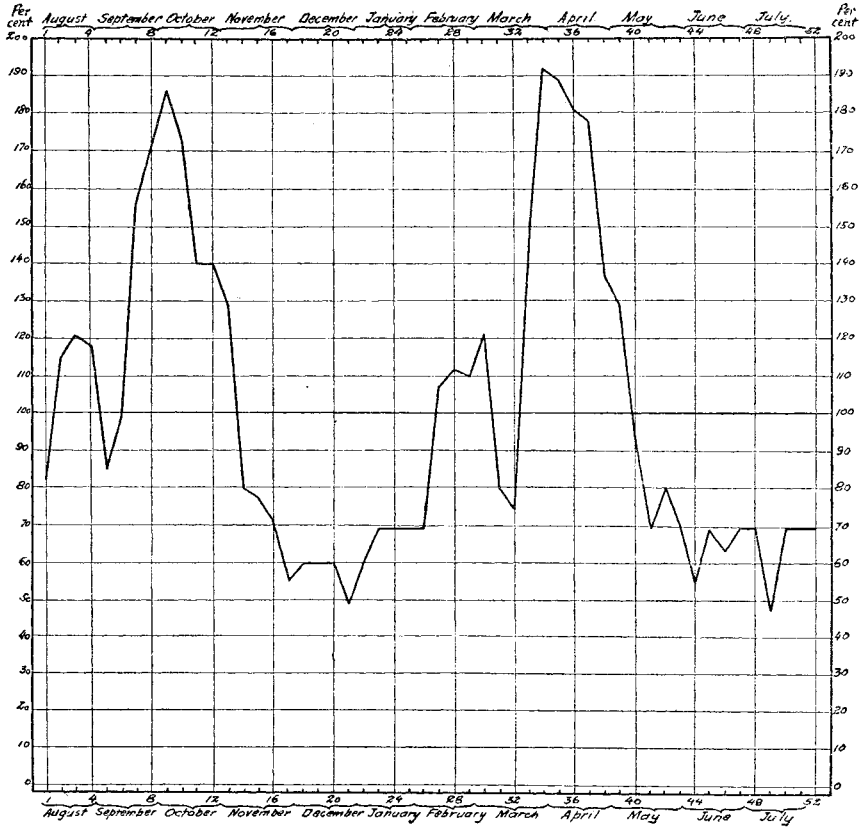
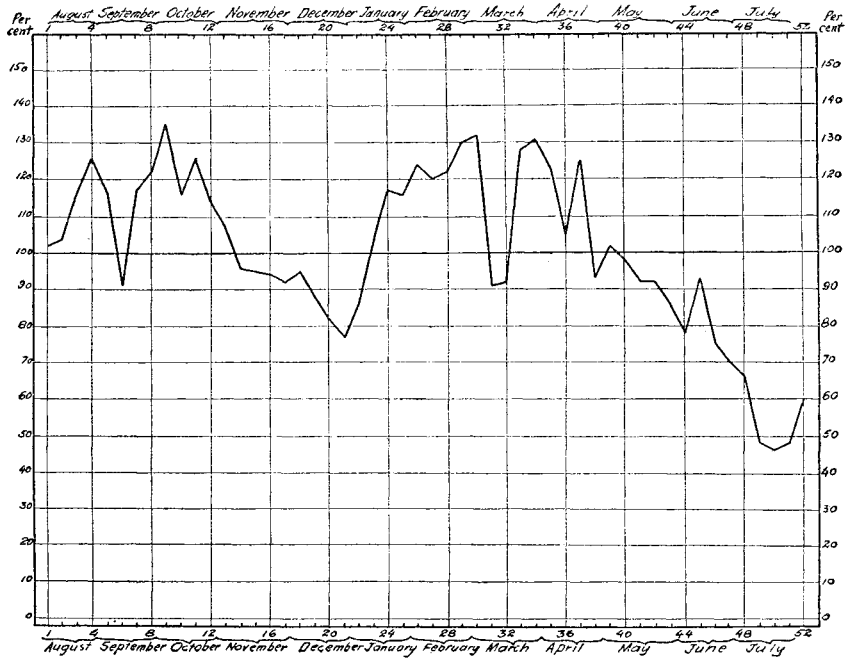


CHART 16.—SEASONAL FLUCTUATIONS OF EMPLOYMENT IN 8 ASSOCIATION SHOPS IN BOSTON, AS SHOWN BY WEEKLY PAY ROLLS, AUGUST, 1912, TO JULY, 1913—FINISHERS, SKILLED, FEMALE.

[Average weekly pay roll for the year=100.]



The group cutters, as shown in the above table and in Chart 11, includes cutters of three descriptions, viz, suit cutters, skirt cutters, and trimming cutters. It shows the least influence of seasonal fluctuations; that is, the major fluctuations are not as violent and pronounced as in other occupations or even the industry at large.

The cutting occupations of Boston have a short busy season in the fall extending over the last three weeks in July, and, to a certain extent, 11 weeks in August, September, and October. The highest point of this season in terms of the average week's pay roll was 114.8 per cent. The second busy season of the year for cutters begins in the last week of January, and extends over a period of about four months. Allowing for the general strike that occurred, as registered by the sudden drop of the pay roll during the first two weeks in March, the normal spring season for cutters in the city of Boston is presumed to be about 20 weeks.

The highest point registered by the cutters' pay roll during this year was 133.1 per cent of the average, just about one-third above the average of the year. This point, had the strike not taken place, would have been lower, almost normal. Apparently, the cutters, unlike their fellow workers in the remainder of the occupations, enjoy relatively steady employment, a condition rather unusual in the garment-manufacturing trades.

Generally speaking, the greatest fluctuations in employment are found in the pressing occupations. Most of the pressers, in spite of the relatively high minimum weekly rates received, earn less money than workers in occupations paying smaller weekly rates. Few of even the most skilled among them earn $600 per year. The reason for this, of course, is to be found in the unsteady seasonal demands for their labor.

A cursory inspection and comparison of the seasonal fluctuations in employment of cutters and pressers reveal this point. During the second busy season the highest pay-roll percentage reached by the cutters was 133.1. For the pressers the highest point was over the 200 mark—to be precise, 222.1 for under pressers of jackets and 193.6 for upper pressers. A comparison of the lowest points shows the same tendency—that is, for employment in the occupations of pressers to fall far below the average week. The lowest point reached by the cutters' group during the year was 71 per cent of the average, in the second week in December. The least amount of employment for pressers occurred during the first week in January, the total earnings of jacket under pressers during that week having been only one-third of the average, twice as low as that of the cutters.

The seasonal fluctuations in the employment of part pressers—chiefly apprentices and learners in the trade—are somewhat different from the fluctuations in other occupations. For this group of work-

ers the busiest part of the year occurred in the fall weeks. The percentage of the average pay roll reached during this period was 162.1. This busy part of the year was rather short—only three or four weeks. After the third week in October employment began to decline very rapidly till in the third week in January it reached the lowest point of the entire year, when the pay roll was 42.2 per cent of the average. With the coming of the third week in March began the spring busy season of the year, extending to the fourth week in May. The highest point of this busy season was reached during the third week in April, the pay roll registering 131 per cent of the average.

The seasonal fluctuations for finishers, skilled, are shown on two charts, Nos. 15 and 16, for males and females separately. An interesting illustration of the law of so-called "economic determinism" is afforded by a comparison of the fluctuations of employment in the same occupation for the males and females. Though the general tendencies of the season were substantially the same, two busy seasons each followed by periods of comparative slackness, the women seem to have had relatively more steady employment than the men. It is apparent that in laying off this kind of workers, the employers, on account of the lower rates that they pay to women, prefer to retain them. The relatively more steady employment of women is strikingly shown by a comparison of the lowest and highest points for each, as follows:

	Highest.	Lowest.
Males	191.9	46.6
Females	134.6	46.0

The more regular nature of employment of the females is thus readily seen: The highest point of the season is not as high and the lowest is not as low for females as for the male finishers; that is, the work of the females is more evenly distributed. Tables of earnings of various groups of workers, shown elsewhere in this study, confirm this fact: earnings of female finishers are far more steady than those of the males.

SEASONAL FLUCTUATIONS IN BOSTON AND NEW YORK CITY PAY ROLLS COMPARED.

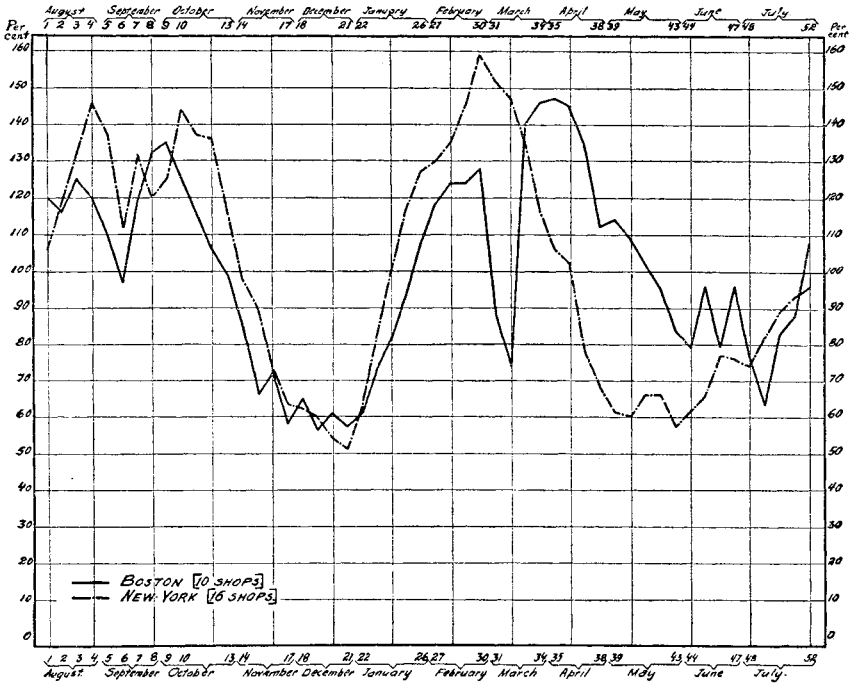
The following chart represents seasonal fluctuations in the cloak, suit, and skirt industries of Boston and New York City during the period covered by this investigation, based on the per cent which the amount of each weekly pay roll for all productive labor was of the average weekly pay roll for the year in 10 Boston shops and 16 shops in New York City. The New York shops were selected chiefly on

the basis of their size in order to make them comparable with the shops covered by the Boston investigation.

As can readily be seen, except for the sudden decline of the Boston pay rolls caused by the general strike of 1913, the fluctuations due to the seasonal character of the industry are surprisingly alike. If not for this abnormal occurrence, the last busy season of the year in Boston would have begun somewhat earlier, almost exactly at the point when the New York curve of employment begins to rise. The

CHART 17.—SEASONAL FLUCTUATIONS OF EMPLOYMENT AS SHOWN BY WEEKLY PAY ROLLS FOR ALL PRODUCTIVE LABOR IN 10 BOSTON AND 16 NEW YORK CITY SHOPS, AUGUST, 1912, TO JULY, 1913.

[Average weekly pay roll for the year=100.]



beginning of the decline of this very season would then coincide with a similar point in the second busy season in New York City, the first two weeks in March.

SEASONAL DEMAND FOR EMPLOYEES AND OPPORTUNITY FOR EARNINGS IN ASSOCIATION SHOPS, BY OCCUPATIONS.

In connection with Table 28 and derived therefrom is here presented Table 30, similar in form to Table 7 for New York City, and showing for each of the 15 occupations the seasonal demands for employees, and their possible earnings on the basis of average weekly

earnings and of the full weekly scale. It must be remembered that this table can be interpreted only as showing possible conditions in the industry on the assumption that the shops reported were operated as one shop. The method of tabulation employed is similar to that used in connection with Table 7, an explanation of which is given on page 33.

TABLE 30.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY PAY-ROLL DATA TAKEN AS A WHOLE FOR ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

[Data obtained from 10 shops for cutters; from 7 shops for pressers; from 8 shops for finishers.]

CUTTERS.

[Possible earnings based on average weekly earnings of $20.67 and full weekly scale of $24.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	14	100.0	1	7.1	$186	$216
10 to 14 weeks	13	92.9	.....	.....	$207 to 289	$240 to 336
15 to 19 weeks	13	92.9	1	7.1	310 to 393	360 to 456
20 to 24 weeks	12	85.7	.....	.....	413 to 496	480 to 576
25 to 29 weeks	12	85.7	.....	.....	517 to 599	600 to 696
30 to 34 weeks	12	85.7	1	7.1	620 to 703	720 to 816
35 to 39 weeks	11	78.6	.....	.....	723 to 806	840 to 936
40 to 44 weeks	11	78.6	1	7.1	827 to 909	960 to 1,056
45 to 49 weeks	10	71.4	1	7.1	930 to 1,013	1,080 to 1,176
50 to 52 weeks	9	64.3	9	64.3	1,034 to 1,075	1,200 to 1,248
Total	.....	.....	14	100.0	.....	.....

SKIRT CUTTERS.

[Possible earnings based on average weekly earnings of $19.20 and full weekly scale of $24.]

Up to 9 weeks	10	100.0	2	20.0	$173	$216
10 to 14 weeks	8	80.0	.....	.....	$192 to 269	$240 to 336
15 to 19 weeks	8	80.0	.....	.....	288 to 365	360 to 456
20 to 24 weeks	8	80.0	.....	.....	384 to 461	480 to 576
25 to 29 weeks	8	80.0	2	20.0	480 to 557	600 to 696
30 to 34 weeks	6	60.0	1	10.0	576 to 653	720 to 816
35 to 39 weeks	5	50.0	.....	.....	672 to 749	840 to 936
40 to 44 weeks	5	50.0	.....	.....	768 to 845	960 to 1,056
45 to 49 weeks	5	50.0	.....	.....	864 to 941	1,080 to 1,176
50 to 52 weeks	5	50.0	5	50.0	960 to 998	1,200 to 1,248
Total	.....	.....	10	100.0	.....	.....

TRIMMING CUTTERS.

[Possible earnings based on average weekly earnings of $16.05 and full weekly scale of $18.]

Up to 9 weeks	13	100.0	1	7.7	$144	$162
10 to 14 weeks	12	92.3	.....	.....	$161 to 225	$180 to 252
15 to 19 weeks	12	92.3	1	7.7	241 to 305	270 to 342
20 to 24 weeks	11	84.6	.....	.....	321 to 385	360 to 432
25 to 29 weeks	11	84.6	.....	.....	401 to 465	450 to 522
30 to 34 weeks	11	84.6	1	7.7	482 to 546	540 to 612
35 to 39 weeks	10	76.9	.....	.....	562 to 626	630 to 702
40 to 44 weeks	10	76.9	.....	.....	642 to 706	720 to 792
45 to 49 weeks	10	76.9	2	15.4	722 to 786	810 to 882
50 to 52 weeks	8	61.5	8	61.5	803 to 835	900 to 936
Total	.....	.....	13	100.0	.....	.....

TABLE 30.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY PAY-ROLL DATA TAKEN AS A WHOLE FOR ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

JACKET UPPER PRESSERS.

[Possible earnings based on average weekly earnings of $19.94 and full weekly scale of $24.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	13	100.0	1	7.7	$179	$216
10 to 14 weeks	12	92.3	1	7.7	$199 to 279	$240 to 336
15 to 19 weeks	11	84.6	2	15.4	299 to 378	360 to 456
20 to 24 weeks	9	69.2	1	7.7	399 to 479	480 to 576
25 to 29 weeks	8	61.5			499 to 578	600 to 696
30 to 34 weeks	8	61.5	1	7.7	598 to 678	720 to 816
35 to 39 weeks	7	53.8	3	23.1	698 to 778	840 to 936
40 to 44 weeks	4	30.8	1	7.7	798 to 877	960 to 1,056
45 to 49 weeks	3	23.1	1	7.7	897 to 977	1,080 to 1,176
50 to 52 weeks	2	15.4	2	15.4	997 to 1,037	1,260 to 1,248
Total			13	100.0		

JACKET UNDER PRESSERS.

[Possible earnings based on average weekly earnings of $15.74 and full weekly scale of $19.]

Up to 9 weeks	13	100.0			$142	$171
10 to 14 weeks	13	100.0	1	7.7	$157 to 220	$190 to 266
15 to 19 weeks	12	92.3	3	23.1	236 to 299	285 to 361
20 to 24 weeks	9	69.2	2	15.4	315 to 378	380 to 456
25 to 29 weeks	7	53.8			394 to 456	475 to 551
30 to 34 weeks	7	53.8	1	7.7	472 to 535	570 to 646
35 to 39 weeks	6	46.2	1	7.7	551 to 614	665 to 741
40 to 44 weeks	5	38.5	1	7.7	630 to 693	760 to 836
45 to 49 weeks	4	30.8			708 to 771	855 to 931
50 to 52 weeks	4	30.8	4	30.8	787 to 818	950 to 988
Total			13	100.0		

SKIRT UPPER PRESSERS.

[Possible earnings based on average weekly earnings of $17.13 and full weekly scale of $22.]

Up to 9 weeks	16	100.0	1	6.3	$154	$198
10 to 14 weeks	15	93.8			$171 to 240	$220 to 308
15 to 19 weeks	15	93.8	1	6.3	257 to 325	330 to 418
20 to 24 weeks	14	87.5	5	31.3	343 to 411	440 to 528
25 to 29 weeks	9	56.3			428 to 497	550 to 638
30 to 34 weeks	9	56.3			514 to 582	660 to 748
35 to 39 weeks	9	56.3	1	6.3	600 to 668	770 to 858
40 to 44 weeks	8	50.0	1	6.3	685 to 754	880 to 968
45 to 49 weeks	7	43.8	1	6.3	771 to 839	990 to 1,078
50 to 52 weeks	6	37.5	6	37.5	857 to 891	1,100 to 1,144
Total			16	100.0		

SKIRT UNDER PRESSERS.

[Possible earnings based on average weekly earnings of $12.90 and full weekly scale of $17.]

Up to 9 weeks	11	100.0	2	18.2	$116	$153
10 to 14 weeks	9	81.8			$129 to 181	$170 to 238
15 to 19 weeks	9	81.8	1	9.1	194 to 245	255 to 323
20 to 24 weeks	8	72.7	3	27.3	258 to 310	340 to 408
25 to 29 weeks	5	45.5	2	18.2	323 to 374	425 to 493
30 to 34 weeks	3	27.3	1	9.1	387 to 439	510 to 578
35 to 39 weeks	2	18.2			452 to 503	595 to 663
40 to 44 weeks	2	18.2			516 to 568	680 to 748
45 to 49 weeks	2	18.2			581 to 632	765 to 833
50 to 52 weeks	2	18.2	2	18.2	645 to 671	850 to 884
Total			11	100.0		

TABLE 30.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY PAY-ROLL DATA TAKEN AS A WHOLE FOR ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

PART PRESSERS.

[Possible earnings based on average weekly earnings of $11.15; no weekly scale.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	6	100.0	1	16.7	$100	
10 to 14 weeks	5	83.3	1	16.7	$112 to 156	
15 to 19 weeks	4	66.7			167 to 212	
20 to 24 weeks	4	66.7			223 to 268	
25 to 29 weeks	4	66.7			279 to 323	
30 to 34 weeks	4	66.7			335 to 379	
35 to 39 weeks	4	66.7			390 to 435	
40 to 44 weeks	4	66.7	2	33.3	446 to 491	
45 to 49 weeks	2	33.3			502 to 546	
50 to 52 weeks	2	33.3	2	33.3	558 to 580	
Total			6	100.0		

JACKET FINISHERS B2 (MALE).

[Possible earnings based on average weekly earnings of $12.01; no weekly scale.]

Up to 9 weeks	5	100.0	1	20.0	$108	
10 to 14 weeks	4	80.0			$120 to 168	
15 to 19 weeks	4	80.0	1	20.0	180 to 228	
20 to 24 weeks	3	60.0			240 to 288	
25 to 29 weeks	3	60.0			300 to 348	
30 to 34 weeks	3	60.0	1	20.0	360 to 408	
35 to 39 weeks	2	40.0			420 to 468	
40 to 44 weeks	2	40.0			480 to 528	
45 to 49 weeks	2	40.0			540 to 588	
50 to 52 weeks	2	40.0	2	40.0	601 to 625	
Total			5	100.0		

SKIRT FINISHERS A1 (MALE).

[Possible earnings based on average weekly earnings of $6.89; no weekly scale.]

Up to 9 weeks	6	100.0	2	33.3	$62	
10 to 14 weeks	4	66.7	1	16.7	$69 to 96	
15 to 19 weeks	3	50.0			103 to 131	
20 to 24 weeks	3	50.0	1	16.7	138 to 165	
25 to 29 weeks	2	33.3			172 to 200	
30 to 34 weeks	2	33.3			207 to 234	
35 to 39 weeks	2	33.3			241 to 269	
40 to 44 weeks	2	33.3			275 to 303	
45 to 49 weeks	2	33.3	1	16.7	310 to 338	
50 to 52 weeks	1	16.7	1	16.7	345 to 358	
Total			6	100.0		

TABLE 30.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY PAY-ROLL DATA TAKEN AS A WHOLE FOR ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Continued.

SKIRT FINISHERS A1 (FEMALE).

[Possible earnings based on average weekly earnings of $6.39; no weekly scale.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	42	100.0	5	11.9	$58	
10 to 14 weeks	37	88.1	1	2.4	$64 to 89	
15 to 19 weeks	36	85.7	2	4.8	96 to 121	
20 to 24 weeks	34	81.0			128 to 153	
25 to 29 weeks	34	81.0	4	9.5	160 to 185	
30 to 34 weeks	30	71.4	2	4.8	192 to 217	
35 to 39 weeks	28	66.7	3	7.1	224 to 249	
40 to 44 weeks	25	59.5	1	2.4	256 to 281	
45 to 49 weeks	24	57.1	5	11.9	288 to 313	
50 to 52 weeks	19	45.2	19	45.2	320 to 332	
Total			42	100.0		

SKIRT FINISHERS A2 (FEMALE).

[Possible earnings based on average weekly earnings of $9.28; no weekly scale.]

Up to 9 weeks	16	100.0	1	6.3	$84	
10 to 14 weeks	15	93.8			$93 to 130	
15 to 19 weeks	15	93.8	1	6.3	139 to 176	
20 to 24 weeks	14	87.5	1	6.3	186 to 223	
25 to 29 weeks	13	81.3	1	6.3	232 to 269	
30 to 34 weeks	12	75.0	1	6.3	278 to 316	
35 to 39 weeks	11	68.8	2	12.5	325 to 362	
40 to 44 weeks	9	56.3			371 to 408	
45 to 49 weeks	9	56.3	1	6.3	418 to 455	
50 to 52 weeks	8	50.0	8	50.0	464 to 483	
Total			16	100.0		

JACKET FINISHERS B1 (FEMALE).

[Possible earnings based on average weekly earnings of $7.46; no weekly scale.]

Up to 9 weeks	27	100.0	4	14.8	$67	
10 to 14 weeks	23	85.2			$75 to 104	
15 to 19 weeks	23	85.2	1	3.7	112 to 142	
20 to 24 weeks	22	81.5	1	3.7	149 to 179	
25 to 29 weeks	21	77.8			187 to 216	
30 to 34 weeks	21	77.8	3	11.1	224 to 254	
35 to 39 weeks	18	66.7	2	7.4	261 to 291	
40 to 44 weeks	16	59.3	4	14.8	298 to 328	
45 to 49 weeks	12	44.4	3	11.1	336 to 366	
50 to 52 weeks	9	33.3	9	33.3	373 to 388	
Total			27	100.0		

JACKET FINISHERS B2 (FEMALE).

[Possible earnings based on average weekly earnings of $10.99; no weekly scale.]

Up to 9 weeks	14	100.0	2	14.3	$99	
10 to 14 weeks	12	85.7	1	7.1	$110 to 154	
15 to 19 weeks	11	78.6			165 to 209	
20 to 24 weeks	11	78.6			220 to 264	
25 to 29 weeks	11	78.6			275 to 319	
30 to 34 weeks	11	78.6			330 to 374	
35 to 39 weeks	11	78.6	1	7.1	385 to 429	
40 to 44 weeks	10	71.4	3	21.4	440 to 484	
45 to 49 weeks	7	50.0	3	21.4	495 to 539	
50 to 52 weeks	4	28.6	4	28.6	550 to 571	
Total			14	100.0		

TABLE 30.—SEASONAL DEMAND FOR EMPLOYEES AND POSSIBLE EARNINGS AS SHOWN BY PAY-ROLL DATA TAKEN AS A WHOLE FOR ASSOCIATION SHOPS, BY OCCUPATIONS, AUGUST, 1912, TO JULY, 1913—Concluded.

CLEANERS (FEMALE).

[Possible earnings based on average weekly earnings of $4.77; no weekly scale.]

Period.	Maximum number of employees required in each period.		Employees required for a full year and additional employees required for each specified shorter period.		Possible earnings per employee in each group.	
	Total.	Per cent of total in period employing greatest number.	Number.	Per cent of total in period employing greatest number.	On basis of average weekly earnings.	On basis of full weekly scale.
Up to 9 weeks	14	100.0	3	21.4	$43	
10 to 14 weeks	11	78.6	1	7.1	$48 to 67	
15 to 19 weeks	10	71.4			72 to 91	
20 to 24 weeks	10	71.4	2	14.3	95 to 114	
25 to 29 weeks	8	57.1			119 to 138	
30 to 34 weeks	8	57.1			143 to 162	
35 to 39 weeks	8	57.1	2	14.3	167 to 186	
40 to 44 weeks	6	42.9			190 to 210	
45 to 49 weeks	6	42.9	1	7.1	215 to 234	
50 to 52 weeks	5	35.7	5	35.7	239 to 248	
Total			14	100.0		

The method employed here of showing the seasonal demand for workers in terms of the highest number required in the week showing highest number of employees is introduced for two reasons: (*a*) To corroborate the results based on the total number found in each occupation, and (*b*) because it is a fact borne out by statistics that even at the busiest point of the season there are to be found unemployed workers. This fact can in no way be charged up to the seasonal character of the industry; it is due more or less to the inability of society to adjust the supply exactly to the demand. On the other hand, the highest number ever required, considering things as they are, is due entirely to the character of the trade. It is a fact to be reckoned with in a scientific study of the industry. The industry, seasonal as it is, would surely fail to accomplish its functions if the required extra workers were not on hand at the proper moment.

The table which follows shows by occupations what per cent of the highest number of employees worked each classified number of weeks or more, thus summarizing the seasonal demand for workers as shown by the pay rolls. For purposes of still clearer analysis the 15 occupations are combined into four groups, three for males and one for females. The group of cutters includes suit cutters, skirt cutters, and trimming cutters. The group of pressers includes jacket upper and jacket under pressers, skirt upper and skirt under pressers, and part pressers. The group of finishers, male, includes jacket finishers, skilled, and skirt finishers, unskilled. For the females,

the group designated as finishers includes every grade of work in the finishing departments of the shops taken, not excluding cleaners.

TABLE 31.—SEASONAL DEMAND FOR EMPLOYEES IN SPECIFIED OCCUPATIONS IN ASSOCIATION SHOPS AS SHOWN BY PER CENT OF HIGHEST NUMBER REQUIRED WHO WORKED EACH CLASSIFIED NUMBER OF WEEKS OR MORE.

[Data obtained from 10 shops for cutters; 7 shops for pressers; 8 shops for finishers.]

Occupation.	Per cent of employees working each classified number of weeks or more.									
	1 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 52
MALE.										
Cutters:										
Suit	100	92.9	92.9	85.7	85.7	85.7	78.6	78.6	71.4	64.3
Skirt	100	80.0	80.0	80.0	80.0	60.0	50.0	50.0	50.0	50.0
Trimming	100	92.3	92.3	84.6	84.6	84.6	76.9	76.9	76.9	61.5
Average for group	100	89.2	89.2	83.8	83.8	78.4	70.3	70.3	67.6	59.5
Pressers:										
Jacket upper	100	92.3	84.6	69.2	61.5	61.5	53.8	30.8	23.1	15.4
Jacket under	100	100.0	92.3	69.2	53.8	53.8	46.2	38.5	30.8	30.8
Skirt upper	100	93.8	93.8	87.5	56.3	56.3	56.3	50.0	43.8	37.5
Skirt under	100	81.8	81.8	72.7	45.5	27.3	18.2	18.2	18.2	18.2
Part presser	100	83.3	66.7	66.7	66.7	66.7	66.7	66.7	33.3	33.3
Average for group	100	91.5	86.4	74.6	55.9	52.5	47.5	39.0	30.5	27.1
Finishers:										
Jacket, skilled	100	80.0	80.0	60.0	60.0	60.0	40.0	40.0	40.0	40.0
Skirt, unskilled	100	66.7	50.0	50.0	33.3	33.3	33.3	33.3	33.3	16.7
Average for group	100	72.7	63.6	54.5	45.5	45.5	36.4	36.4	36.4	27.3
FEMALE.										
Finishers:										
Jacket, skilled	100	85.7	78.6	78.6	78.6	78.6	78.6	71.4	50.0	28.6
Skirt, skilled	100	93.8	93.8	87.5	81.3	75.0	68.8	56.3	56.3	50.0
Jacket, unskilled	100	85.2	85.2	81.5	77.8	77.8	66.7	59.3	44.4	33.3
Skirt, unskilled	100	88.1	85.7	81.0	81.0	71.4	66.2	59.5	57.1	45.2
Cleaners	100	78.6	71.4	71.4	57.1	57.1	57.1	42.9	42.9	35.7
Average for group	100	86.7	84.1	80.5	77.0	72.6	67.3	58.4	51.3	39.8

As compared with the maximum number required for the shortest period 59.5 per cent of the cutters in the shops investigated worked between 50 and 52 weeks. That chances of the pressers for more or less permanent employment, for 50 to 52 weeks, were less than one-half as large as those of the cutters, is shown by the fact that only 27.1 per cent of the maximum number of pressers required worked 50 to 52 weeks. The male finishers fared only a trifle better than the pressers; 27.3 per cent of them worked between 50 and 52 weeks.

The table shows that, compared with the maximum number required, 67.6 per cent of the cutters, 30.5 per cent of the pressers, and 36.4 per cent of the male finishers worked 45 weeks or more; 39.8 per cent of the females in all of the finishing occupations worked 50 to 52 weeks, and 51.3 per cent of them worked 45 weeks or more.

An interesting side light on existing conditions with reference to males and females working in the same or identical occupations is

shown by comparing the seasonal demands for male and female finishers. The female finishers seem to be more steadily employed, having larger percentages of the respective highest numbers than the male finishers in each group of weeks.

This phenomenon can be interpreted easily when the average weekly earnings of males and females in identical occupations are compared. The average weekly earnings of males and females in the finishing departments investigated were $12.01 and $10.99 respectively. These figures would tend to show why, when the dull season appears and help is being laid off, females are more often retained.

In all male occupations 49.5 per cent of the highest number required at any time were employed 40 weeks and over during the year under investigation. The females, generally speaking, seem to have been more steadily employed; 58.4 per cent of the highest number ever required worked over 40 weeks. The average for all occupations was 54.1 per cent; that is, only 54 individuals of every 100 employed during the week employing the highest number were given an opportunity to work between 40 and 52 weeks. These facts are brought out in the following table (No. 32), derived from Table 30:

TABLE 32.—MAXIMUM NUMBER OF WORKERS REQUIRED DURING THE BUSIEST WEEK AND NUMBER AND PER CENT EMPLOYED FOR 40 TO 52 WEEKS, BY SEX AND OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

[Data obtained from 10 shops for cutters; from 7 shops for pressers; from 8 shops for finishers.]

Occupation.	Maximum number required during busiest week of the year.	Workers employed 40 to 52 weeks.	
		Number.	Per cent of maximum number required during busiest week.
MALE.			
Suit cutters	14	11	78.6
Skirt cutters	10	5	50.0
Trimming cutters	13	10	76.9
Jacket upper pressers	13	4	30.8
Jacket under pressers	13	5	38.5
Skirt upper pressers	16	8	50.0
Skirt under pressers	11	2	18.2
Part pressers	6	4	66.7
Skirt finishers, unskilled	6	2	33.3
Jacket finishers, skilled	5	2	40.0
Total	107	53	49.5
FEMALE.			
Skirt finishers, unskilled	42	25	59.5
Skirt finishers, skilled	16	9	56.3
Jacket finishers, unskilled	27	16	59.3
Jacket finishers, skilled	14	10	71.4
Cleaners	14	6	42.9
Total	113	66	58.4
Grand total	220	119	54.1

The following table, based on individual schedules, shows the number of workers in each specific occupation that were found working in one or more of the shops investigated during the year, August, 1912, to July, 1913. Of these, 47.6 per cent were females, who were employed chiefly at basting, skirt and jacket finishing, and cleaning.

TABLE 33.—NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED NUMBER OF WEEKS IN SPECIFIED OCCUPATIONS ACCORDING TO INDIVIDUAL SCHEDULES TAKEN IN ASSOCIATION SHOPS, AUGUST, 1912, TO JULY, 1913.

[Data obtained from 10 shops for cutters; from 7 shops for pressers; from 8 shops for finishers.]

Occupation.	Total number reported.	Number reported as working each classified number of weeks.													
		1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 52
MALE.															
Head cutters	2														2
Regular cutters (suit)	20		1	2	2	1	1	2				1	1	2	7
Skirt cutters	17	4	2	1		2	1			1	1				5
Canvas cutters	2									1					1
Trimming cutters	15		1			2			1			1	2	2	6
Apprentice cutters	16	1	1	1	1	4	1	2	1				1	1	2
Head pressers	1														1
Jacket upper pressers	19					1	1	8	6	1					2
Jacket under pressers	15	1						4	3	1	2				4
Skirt upper pressers	20					2	2	2	8						6
Skirt under pressers	14		2			1	3	1	4	1					2
Part pressers	8	1				1			3				1	1	1
Apprentice pressers	12			1		2	1	1	4	1					2
Basters	1													1	
Skirt finishers, Group A1	8			2		1	2			2				1	
Skirt finishers, Group A2	2								1			1			
Jacket finishers, Group B2	7					2	3								2
Sample finishers	8	1	1	3		1	1			1					
Total	187	8	8	10	3	20	16	20	31	9	3	3	5	8	43
FEMALE.															
Basters	1														1
Skirt finishers, Group A1	75	4	2	4	5	11	4	8	10	5	4	3	2	9	4
Skirt finishers, Group A2	23	1	1			4	3	2	1		1	1	1	2	6
Jacket finishers, Group B1	31	3	1			2	1	2	1		2	2	7	6	4
Jacket finishers, Group B2	16				2	1	1		2				4	3	3
Cleaners	24	2	2	1	1	3	2	5	1	1	1	1		2	2
Total	170	10	6	5	8	21	11	17	15	6	8	7	14	22	20
Grand total	357	18	14	15	11	41	27	37	46	15	11	10	19	30	63

The positions of head cutter and of head presser are of a supervisory nature, and it is therefore no surprise that all the employees in these occupations whose records were secured—a total of 3—were employed steadily during the year, for 50 to 52 weeks.

The actual differences between the occupations of canvas cutter and of apprentice cutter are rather small. The canvas cutter is in reality a learner. The apprentice cutter gets his experience through cutting canvas. Hence these occupations, for purposes of analysis, were combined.

Out of a total of 18 that were found in the canvas and apprentice cutter occupations, 12, or two-thirds, worked 24 weeks or less. Only

5 individuals, or about 28 per cent of the total, could be considered as more or less permanently employed, having worked 40 to 52 weeks. Of these 5 only 3, or about 16.6 per cent of the total, were permanently employed during the year.

As in the case of the canvas and apprentice cutters just described, and substantially for the same reasons, the occupations of apprentice presser and part presser, for purposes of analysis, were combined.

Of the 20 workers doing part or apprentice pressing three-quarters worked 29 weeks or less during the year under investigation. Of these, 5 worked from 40 to 52 weeks and 3 worked between 50 and 52 weeks.

Eight sample finishers, all of them men, were found in the shops investigated. None of these were employed for more than 29 weeks; 6, or 75 per cent, of all the sample finishers worked 9 weeks or less.[1]

ACTUAL EARNINGS OF 312 WEEK WORKERS IN THE SHOPS INVESTIGATED.

The table which follows is based upon schedules of individual workers found working in one or more of the shops investigated. The actual number of workers employed in each occupation is invariably larger than the highest number ever required. Even in the busiest part of the season, though "manless jobs" may exist, there are also to be found "jobless men." As the object of this table was chiefly to show the opportunities for earnings that workers had in the shops investigated during the period covered, it was deemed advisable to figure the percentages in terms of total number employed in a specific occupation during the year instead of taking the highest number ever required as the base.

As will be shown elsewhere, the actual annual earnings of individuals could not be ascertained for several reasons, chiefly (*a*) because not all the shops in Boston were investigated, and (*b*) because even if all the Boston shops had been taken, no absolute figures showing annual earnings of individuals could be obtained for the reason that New York City, which is the main cloak, suit, and skirt center of the country, is so near by. It is well known that many garment workers travel from Boston to New York in search of employment. Some of these undoubtedly secure employment.

In all, the following table gives information of actual earnings in the shops investigated of 312 week workers, by sex and occupation. Before discussing the figures, an explanation is necessary with reference to the occupation of finishers, male as well as female. There were found two distinct grades of finishers—finishers, skilled, desig-

[1] The difference in the total number of workers found in each occupation and the far smaller number required at the busiest points of the season is apparently due to the fact: (*a*) That some of the workers in each occupation are unemployed even at the busiest points of the seasons, and (*b*) that some might have been working during the year in shops other than those investigated.

nated as finishers A2 for skirts and B2 for jackets, and finishers, unskilled, designated as A1 for skirts and B1 for jackets. This classification refers to male as well as to female workers. The unskilled finishers, whose work consists chiefly in sewing on buttons, hooks, and eyes, receive a smaller wage than the skilled finishers. The skilled finishers are engaged in tacking on belts and bottoms on skirts, and in sewing in the lining in jackets.

TABLE 34.—PER CENT OF WEEK WORKERS (143 MALE AND 169 FEMALE) IN 15 OCCUPATIONS EARNING EACH CLASSIFIED AMOUNT, AS SHOWN BY INDIVIDUAL SCHEDULES, AUGUST, 1912, TO JULY, 1913.

[Each of the 312 individual workers shown in this table had been traced through all of the shops investigated—10 shops for cutters, 7 shops for pressers, and 8 shops for finishers. None of the 312, save 1 female finisher, worked in more than 1 of the shops investigated. The female finisher mentioned worked in shop No. 4 from the fourth to the sixteenth week as cleaner and in shop No. 3 as an A1 skirt finisher; total earnings $149.]

MALES.

Classified amount of actual earnings.	Per cent earning each classified amount.									
	Suit cutters.	Skirt cutters.	Trimming cutters.	Jacket upper pressers.	Jacket under pressers.	Skirt upper pressers.	Skirt under pressers.	Part pressers.	Jacket finishers B2.	Skirt finishers A1.
Under $100	31.6	38.9	6.7	.....	6.7	.....	21.4	25.0	42.9	50.0
$100 to $199	.....	11.1	13.3	10.5	.....	15.0	21.4	.....	28.6	37.5
$200 to $299	10.6	.....	.....	5.3	26.6	15.0	28.5	37.5	.....	.....
$300 to $399	5.3	5.6	6.7	42.2	26.7	40.0	14.3	12.5	.....	12.5
$400 to $499	.....	.....	.....	31.6	.....	.....	7.1	12.5	.....	.....
$500 to $599	.....	11.1	6.7	.....	13.3	.....	.....	.....	.....	.....
$600 to $699	5.3	.....	6.7	.....	6.7	.....	.....	.....	28.6	.....
$700 to $799	5.3	.....	46.7	.....	.....	.....	7.1	12.5	.....	.....
$800 to $899	5.3	.....	.....	.....	13.3	15.0	.....	.....	.....	.....
$900 to $999	5.3	16.7	6.7	5.3	6.7	10.0	.....	.....	.....	.....
$1,000 and over	31.6	16.7	6.7	5.3	.....	5.0	.....	.....	.....	.....
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	19	18	15	19	15	20	14	8	7	8
Average weekly earnings	$20.67	$19.20	$16.05	$19.94	$15.74	$17.13	$12.90	$11.15	$12.01	$6.89

FEMALES.

Classified amount of actual earnings.	Per cent earning each classified amount.				
	Finishers.				Cleaners.
	Skirt A1.	Skirt A2.	Jacket B1.	Jacket B2.	
Under $100	43.4	34.7	19.4	18.8	73.9
$100 to $199	31.6	17.4	12.9	6.3	8.7
$200 to $299	13.1	8.6	16.2	12.5	17.4
$300 to $399	11.8	4.3	48.4	.....	.....
$400 to $499	.....	17.4	.....	43.8	.....
$500 to $599	.....	13.0	3.2	.....	.....
$600 to $699	.....	4.3	.....	18.8	.....
$700 to $799	.....	.....	.....	.....	.....
$800 to $899	.....	.....	.....	.....	.....
$900 to $999	.....	.....	.....	.....	.....
$1,000 and over	.....	.....	.....	.....	.....
Total	100.0	100.0	100.0	100.0	100.0
Number of workers	76	23	31	16	23
Average weekly earnings	$6.39	$9.28	$7.46	$10.99	$4.77

Considering first the male employees, this table shows that 31.6 per cent of the suit cutters, 16.7 per cent of the skirt cutters, and 6.7 per cent of the trimming cutters earned $1,000 and over; 66.8 per cent of the trimming cutters, 52.8 per cent of the suit cutters, and 33.4 per cent of the skirt cutters earned $600 and over. The average weekly earnings were as follows: Suit cutter, $20.67; skirt cutter, $19.20; trimming cutter, $16.05.

None of the under pressers were in the group earning $1,000 and over; only 5.3 per cent of the jacket upper and 5 per cent of the skirt upper pressers earned $1,000 and over; 42.2 per cent of the upper pressers of jackets and 40 per cent of the upper pressers of skirts, 26.7 per cent of the under pressers of jackets, and 14.3 per cent of the under pressers of skirts earned from $300 to $399. The average weekly earnings of the pressers were: Jacket upper, $19.94; skirt upper, $17.13; jacket under, $15.74; skirt under, $12.90; part presser, $11.15.

Male finishers were found in only two branches of the finishing departments of the eight shops investigated—jacket finishers, skilled, and skirt finishers, unskilled. Of the jacket finishers, 28.6 per cent earned from $600 to $699; the remaining men of this group, 71.5 per cent, earned below $200. Of the unskilled male finishers, 87.5 per cent earned under $200; 12.5 per cent of them earned from $300 to $399. The average earnings of the finishers were: Jacket finishers, skilled, $12.01; skirt finishers, unskilled, $6.89.

None of the female workers were found in the group $700 to $799, or any of the higher earning groups. Only 18.8 per cent of the skilled jacket finishers and 4.3 per cent of the skilled skirt finishers earned from $600 to $699. None of the unskilled finishers on skirts earned over $399, but 43.8 per cent of skilled jacket finishers earned $400 to $499. The average earnings of the female workers were as follows: Jacket and skirt finishers, skilled, $10.99 and $9.28, respectively; jacket finishers, unskilled, $7.46; skirt finishers, unskilled, $6.39.

Of the cleaners none earned over $300; 73.9 per cent earned under $100; 8.7 per cent, from $100 to $199; and 17.4 per cent, from $200 to $299. The average weekly earnings were $4.77.

ANNUAL EARNINGS OF WEEK WORKERS.

It is obvious that the key to individual annual earnings, provided the work be equally distributed, is to be found in the amounts of money paid out each week for labor of specific occupations. Moreover, the changes in these amounts from week to week register the amount of employment in the industry at large. Generally speaking, when the busy periods of the year are on the decline, there is little chance for workers to retain their old positions or to secure new ones.

Considering the amount expended during the highest week as 100 per cent, the relative part of this percentage that the pay roll of the average week of the year would constitute might be considered as a reliable indication of the amount of money that the industry expends each week of the year for specific labor; this means that, if the work to be performed be equally distributed among all the workers employed, the proportion of the average weekly earnings of individuals to their earnings during the busiest week would be the same as the proportion of the average pay roll to the pay roll for the busiest week. Calculating the average weekly earnings per individual on this basis and multiplying the result by 52, a fairly close estimate of the annual earnings of individuals in specific occupations is secured.[1]

The following table presents such an estimate, the figures being obtained specifically in the following manner:

In column 2, showing the pay roll of average week in percentage of highest week, the figures were obtained by dividing the amount expended for each specific occupation during the busiest week into the amount expended during the average week of the year. Column 3, showing average individual earnings in the highest week, was obtained by dividing the total expended for the specific occupation during the highest week by the number of workers in that occupation employed during the same week. Column 4, showing individual earnings in average week of the year, was obtained by multiplying figures of column 3 by respective figures of column 2. In column 5 the estimated possible annual earnings were obtained by multiplying the figures in column 4 by 52.

TABLE 35.—ESTIMATED ANNUAL EARNINGS OF WEEK WORKERS IN SPECIFIC OCCUPATIONS, AUGUST, 1912, TO JULY, 1913.

[Data obtained from 10 shops for cutters; from 7 shops for pressers; from 8 shops for finishers.]

Occupation.	Pay roll of average week in per cent of highest week.	Average individual earnings in highest week.	Individual earnings in average week of entire year.	Estimated possible annual earnings.
Cutters: MALE.				
Suit	75.7	$22.85	$17.30	$900
Skirt	60.0	21.80	13.08	680
Trimming	68.8	19.38	13.33	693
Pressers:				
Jacket upper	41.2	29.23	12.04	626
Skirt upper	59.7	19.19	12.49	650
Jacket under	45.0	22.07	9.93	516
Skirt under	40.1	15.55	6.25	325
Part	61.6	12.17	7.49	389
Finishers:				
Jacket, skilled	52.1	17.50	9.12	474
Skirt, unskilled	37.9	10.00	3.79	197
Finishers: FEMALE.				
Jacket, skilled	72.1	13.65	9.85	512
Skirt, skilled	70.5	10.19	7.18	373
Jacket, unskilled	62.5	8.85	5.53	288
Skirt, unskilled	63.1	7.50	4.73	246
Cleaners	48.6	6.07	2.95	153

[1] Similar results will be obtained if the total amount expended annually on specific occupations be divided by the number of workers required during the busiest week.

In the foregoing table, column 2 represents the relative unsteadiness of work in specific occupations. Male unskilled skirt finishers show the least steady employment, the percentage of the average week compared with the highest being only 37.9. The suit cutters are the most steadily employed, the figure for this group being 75.7. Generally speaking, the pressing occupations afford the least steady employment. Female finishers seem to have the advantage over their male competitors in securing steadier employment. This fact corroborates a statement made elsewhere in this report that in retaining finishers employers, apparently, prefer females because their rates of pay are lower than those of the men in the same occupations.

The table further shows that workers with lower weekly minimum rates may earn more money in the course of the year than some of their fellow workers receiving higher weekly rates. In the city of Boston the rate of trimming cutters is $18, $6, or 33 per cent less than the weekly rate of jacket upper pressers, yet the annual earnings of the trimming cutters were higher than those of the pressers. The same holds true of skirt upper pressers, their annual income, in spite of a higher weekly rate, having been less than that of trimming cutters.

Only in five of the ten occupations in which males were employed had the workers an opportunity of earning over $600 during the year. Skirt under and part pressers earned less than $400. Unskilled female finishers earned less than $300. Cleaners earned only $153.

As these calculations take full cognizance of the seasonal character of the entire industry, there is very little probability that the estimated possible earnings have been supplemented by earnings in shops other than those investigated. As the movement of the season for the same occupations in New York City, appearing elsewhere in this study, is substantially the same, it is rather improbable that the workers, at least most of them, laid off in Boston secured employment in the same industry in New York City.

COMPARATIVE EARNINGS OF WORKERS IN BOSTON AND NEW YORK CITY.

Table 36, which follows, brings into comparison the average weekly earnings of week workers in identical occupations in Boston and New York City, and in this connection Table 37 is also presented, showing the wage scales in the two cities.

TABLE 36.—AVERAGE WEEKLY EARNINGS OF WEEK WORKERS ENGAGED IN IDENTICAL OCCUPATIONS IN BOSTON AND NEW YORK CITY SHOPS, AUGUST, 1912, TO JULY, 1913.

Occupation.[1]	Average weekly earnings in—	
	Boston shops.[2]	90 New York City shops.
MALE.		
Cutters, suit	$20.67	$24.36
Cutters, skirt	19.20	20.96
Jacket upper pressers	19.94	17.65
Jacket under pressers	15.74	14.39
Skirt upper pressers	17.13	16.39
Skirt under pressers	12.90	13.26
Part pressers	11.15	12.26
Finishers, jacket, skilled	12.01	14.68
FEMALE.		
Finishers, jacket, skilled	10.99	10.91
Finishers, skirt, skilled	9.28	9.66

[1] The designations "trimming cutter" and "skirt finisher, unskilled," for male occupations, and "jacket" and "skirt finishers, unskilled," for female occupations, as found in Boston, are not to be found in New York City.

[2] Data obtained from 10 shops for cutters; from 7 shops for pressers; from 8 shops for finishers.

TABLE 37.—COMPARISON OF WAGE SCALES PAID TO WEEK WORKERS IN IDENTICAL OCCUPATIONS IN BOSTON AND NEW YORK CITY.

Occupation.	Rates in—		Per cent of excess in—	
	Boston.	New York City.	Boston over New York City rate.	New York City over Boston rate.
Cutters, suit	$24	$25	.....	4.2
Cutters, skirt	24	21	14.3	.....
Cutters, trimming	18	(1)	.....	.....
Jacket upper pressers	24	[2] 21	14.3	.....
Jacket under pressers	19	[3] 18	5.6	.....
Skirt upper pressers	22	19	15.8	.....
Skirt under pressers	17	15	13.3	.....
Sample jacket makers	24	22	9.1	.....
Sample skirt makers	22	22	.....	.....

[1] Not reported.

[2] Since the signing of the New York City agreement an increase of $2.50 per week has been granted by the board of arbitration to upper pressers of skirts and jackets.

[3] Since the signing of the New York City agreement an increase of $1.50 per week has been granted by the board of arbitration to under pressers of skirts and jackets.

In five of the male and in one of the female occupations the actual average weekly earnings were higher in New York City than in Boston. These occupations were: Suit cutter, skirt cutter, skirt under presser and part presser, and jacket finisher, skilled—all male—and skirt finisher, skilled, female. This is rather interesting in view of the fact that in at least two of these occupations—skirt cutter and skirt under presser—the minimum weekly rates are higher in Boston than in New York City. Apparently, the working periods are more intensive in New York City—that is, the workers, relatively speaking, are kept busier.

PART II.—OCCUPATIONS IN THE CLOAK, SUIT, AND SKIRT INDUSTRY OF NEW YORK CITY, WITH PLANS FOR APPRENTICESHIP FOR CUTTERS AND THE EDUCATION OF WORKERS IN THE INDUSTRY.[1]

BY WILLIAM T. BAWDEN.

INTRODUCTION.

The traditional necessities of the human being are food, clothing, and shelter, but for civilized man each of these has been developed into an elaborate formula. There is even a tendency to apply the term necessity progressively to other items formerly classified as conveniences or luxuries.

To provide clothing for the human race requires now a minimum of attention on the part of each individual and the entire time and energy of many thousands. The making of hats and caps for men and boys, millinery, boots and shoes, hosiery, gloves—each of these is an immense industry in itself, and some of these are subdivided. In the making of garments, strictly speaking, the following distinct industries are now to be found, each with its own methods of production, kinds of raw material, factory organization, and labor problems:

Men's and boys' clothing.
Custom tailoring.
Raincoats and waterproof clothing.
Cloaks, suits, and skirts.
Ladies' tailoring.

[1] The apprenticeship plan for cutters here given is the result of a request by the board of arbitration made to Mr. Chas. H. Winslow while carrying out the investigation of wages and regularity of employment, etc., that an attempt be made to work out an apprenticeship plan for cutters acceptable to both employers and employees. Conferences for the working out of the plan were thereupon held, consisting of representatives of employers and employees, and Dr. Walter E. Weyl representing the board of arbitration, Mr. Chas. H. Winslow of the Bureau of Labor Statistics, and the author of this description of the plans for apprenticeship for cutters and the education of workers in the industry. The plan here described is the result of those conferences.

The plan for education of workers in the industry was worked out following the tentative acceptance by both employers and employees of the apprenticeship plan for cutters upon a further request from the employers' association and the unions.

Dresses and waists.
Wrappers and kimonos.
Children's and misses' garments.
Woolen underwear.
Corsets.
White goods: Muslin underwear and lingerie.

The following report deals with occupations in the cloak, suit, and skirt industry of Greater New York. It admits of presentation as a study logically complete in itself, but it is also to be considered as an integral part of a much larger investigation conducted by the board of arbitration during the winter of 1913–14.[1]

It will be found that this report is characterized by certain omissions and limitations. This is due partly to conditions under which the work was done and partly to the policy by which it was guided. It was believed to be more profitable to undertake a limited piece of work and to attempt to do it thoroughly than to spread a superficial inquiry over a wider area.

The objects of study in the following pages are: The kinds of processes engaged in by the workers in this industry and the qualifications necessary for success in the same; provision made by the industry, as now organized, for the promotion of the individual from the less skilled and lower-paid occupations to those of higher grade; the possibility of so organizing the industry as to make this provision more successfully and economically, through apprenticeship, industrial education, or otherwise; racial and personal characteristics of the individuals employed. Consideration of wages is only incidental, in view of the attention given to this subject in another part of the general investigation. No attention is here given to the physical conditions in the factories, because of the adequate provision made for dealing with this problem by the joint board of sanitary control.

The methods employed in prosecuting this inquiry are perhaps of equal interest with the results, hence the description includes sufficient reference to details to enable others to check up the results and also to make other investigations whose results might be comparable.

If this study contributes something to the understanding of conditions in the industry and to the improvement of those conditions through the adoption and perfection of measures for the adequate training of the worker, it will have served its double purpose.

[1] The general inquiry into conditions in the industry was under the immediate supervision of one of the members of the board, Dr. Walter E. Weyl, who placed its direction in the hands of Mr. Charles H. Winslow, special agent of the United States Bureau of Labor Statistics. To the writer of this report was assigned the problem of analyzing and describing the occupations in the industry and assisting in the development of plans for apprenticeship.

DESCRIPTIVE ANALYSIS OF OCCUPATIONS.

In order to prepare a description of the kinds of processes carried on, numerous visits were made to factories and extended conferences were held with employers and with expert workers in all divisions. The various groups of occupations were written up and the written accounts gone over carefully, paragraph by paragraph, by both employers and employees in many different factories. The statements as here presented, therefore, have received the critical examination and final approval of numerous individuals who know the industry from extensive inside acquaintance. At the same time they represent the personal observations of an outsider.

The first point that impresses the investigator as he examines the factory methods in this industry is that subdivision of labor has not been carried to anything approaching the extremes that characterize many other lines of work. The occupations are much more specialized even in other branches of garment making, as in men's clothing, or in dresses and waists. The number of individuals engaged in monotonous and repetitive processes is very small, if not negligible.

The occupations are conveniently divided into four groups, those connected with:

1. Planning and designing the garment and making the pattern.
2. Cutting the cloth from the pattern.
3. The actual construction of the garment.
4. Pressing.

DESIGNERS.

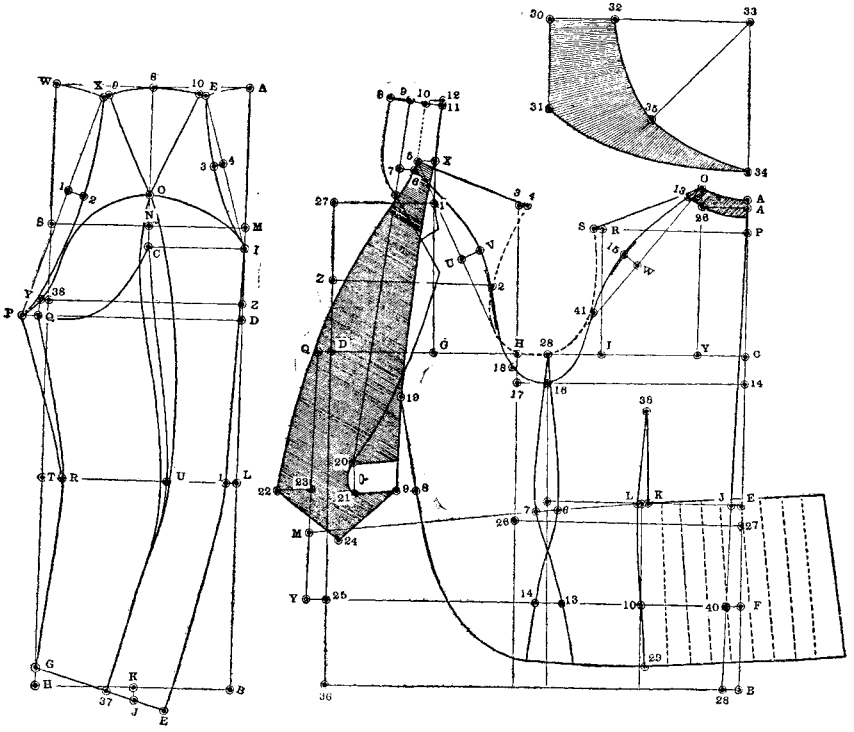
The first person involved in the process of manufacturing a cloak, suit, or skirt, is the designer. At the beginning of the season the first thing that is done is to settle upon a standard or foundation garment (also called body garment) for each of the various distinct styles or lines that it is proposed to make. This standard garment is one made on plain simple lines, and in some cases holds over from season to season with no substantial changes. The principal qualification is that it shall fit and hang properly. The standard garment is to the work of the designer what the fondant is to the work of the candy maker, who from one common base is able to produce a great variety of confections. The accompanying diagram shows the draft of a pattern for a plain standard jacket (light lines), and the pattern for a style derived from it (heavy lines). The shaded portions represent the parts of the vest.

From the pattern for the standard garment the designer has the sample maker make a model, using for this purpose pressing cloth. This material gets its name from the use made of it by the presser (who is described later), who places a piece of it between the hot iron and the garment on which he is working during the process of pressing.

Pressing cloth is a light weight of unbleached linen duck. Aside from the uses mentioned, it is sometimes used in making pockets in trousers in cheap grades of men's clothing.

The designer places the model made of pressing cloth on a dummy form and uses it as a basis from which to derive a new style. With a piece of black crayon he indicates on the goods the various changes that will produce the new garment that he has in mind. By changing the location of seams, size and shape of lapel, style and position of pocket or cuff, amount of cutaway, or length, a new garment is created. The pressing-cloth model is then taken apart and cut on

DRAFT OF PATTERN FOR PLAIN STANDARD JACKET.



the new lines as indicated by the black-crayon marks. The separate pieces are then pressed out, and laid in position on a large sheet of paper. After making the necessary allowances for seams the exact shape of each piece that is to enter into the garment is traced on the paper. The paper is then cut on the lines as drawn, and the several pieces of paper resulting constitute the pattern for the proposed new garment. The original pattern is always made in size 36.

A sample cutter cuts out the material for a model or trial garment, again using the pressing cloth, without lining or interlining, and the sample maker puts it together. This model is examined very care-

fully by the designer to determine whether it fulfills the requirements in every respect. If necessary, it is ripped apart, alterations are made, and it is fitted on a dummy figure, until finally it is accepted as satisfactory. If alterations are made in the model the corresponding alterations are made in the pattern.

The pattern is then sent to the cutting department, where a cutter (who is described later) cuts out the material for a sample garment, including the cloth, lining, and interlining. This bundle of material, together with the necessary trimmings and buttons, is then sent to the sample maker, a skilled tailor who, working under the immediate direction of the designer, makes a sample garment.

The different parts of the garment are basted together by hand, and the partly finished garment is placed on a dummy figure, or a living model, according to the importance of the work or the grade of the output, and carefully examined at the different stages in the process of making. Because of the care with which the work must be done, and the necessary interruptions for trial and fitting, the sample maker takes very much longer in the making of this first garment than is required by the worker in the factory under the usual methods of production. The sample maker may spend two or three weeks on a garment that the piece tailor can make in one day. For this reason, principally, the sample maker is always employed on a week-wage basis.

In addition to assisting the designer in developing new ideas and styles by trying on, as indicated, models are also used in the showrooms in the display of garments for the inspection of buyers.

It is to be understood that from a single satisfactory standard pattern, as described, the designer usually develops a number of variant styles. This is accomplished by designing for use with a suitable body pattern two or more forms of sleeve, collar, lapel, pocket, etc., and also by different uses and combinations of trimmings.

Qualifications of the Designer.—The designer must have an understanding of the work of all branches of the business and himself be a skilled mechanic, as otherwise he could not hope for success in designing garments that can be manufactured practically and economically. Almost all of the designers in the United States, it is said, began work as boys and learned their trade as tailors and cutters in Europe. They have come from Germany, Russia, Austria, France, and Italy, and in many cases have served regular apprenticeships. Designers range in age from 25 to 45 years.

The designer must make a thorough study of the requirements of the trade served by his house, as it would be disastrous to produce a line of goods either too elaborate and high priced or of too low grade.

The house usually purchases the material and puts up to the designer the problem of turning out garments that will sell. The designer is constantly on the lookout for new ideas. Those employed by the best houses regularly visit Paris and other European cities in search of the novel and the attractive. Styles which have been created by high-class custom tailors for exclusive patrons are frequently drawn upon for new ideas by designers who are able to reproduce from memory, with substantial accuracy, details from costumes seen in the market, in the hotel lobbies, theaters, cafés, and elsewhere.

A high degree of skill is sometimes shown by the designer in planning garments that can be cut out of the goods with a minimum waste of material. When garments are to be made in large quantities, and when low cost of production per unit is the important consideration, rather than style, it is necessary that the garments be capable of being put together by the tailor, or the operator at the machine, with a minimum of trouble. This means a lower manufacturing cost because of the lower piece rate for labor. The one thing that all manufacturers and designers strive for, however, is that elusive quality called "style." Without this quality a garment may not bring $10 in the market; with it, another garment, costing no more for material and labor, may bring $30 to $50.

WAGES.—The earning capacity of designers varies greatly, of course, as does their individual ability. The wages paid vary from $25 per week, or even less, for a beginner who is willing to work and wishes to gain experience under favorable conditions, to $8,000 or $10,000 per year in a few exceptional cases. Models earn from $15 to $25 per week.

CUTTERS.

GRADING THE PATTERNS.—The foreman cutter, or head cutter, takes the pattern which has been made by the designer, and gives it to the grader, who grades it to the sizes required by the orders which are to be filled. This means the making of a set of paper patterns by reducing and increasing, proportionately, the dimensions of the original pattern in order to produce patterns for the sizes smaller and larger than size 36, respectively. To do this work of grading skillfully requires considerable knowledge of drafting as well as of the work of the cutter.

DIRECTION CARD AND CUTTING TICKET.—The head cutter also makes out the direction card, on which are enumerated all the component parts of the garment. From orders received the office makes up a cutting ticket for each lot of garments to be made, and sends it to the head cutter. The cutting ticket specifies style, sizes, and quantities of garments to be made. Facsimiles of this card and ticket follow.

TRIMMINGS AND COMBINATIONS.—As soon as a sample is made, and as a part of the process of making up the estimate, a trimming girl prepares a list of buttons, hooks, ornaments, etc., that are used. A calculation slip, facsimile of which is here presented, is prepared for use in figuring the manufacturing cost of a garment. The trimmings are distinguished from the combinations as including items

SAMPLE OF DIRECTION CARD, SHOWING COMPONENT PARTS OF GARMENT.

CLOTH CARD.

Style No. 2538

Cutters must Compare their Tickets with Material and Patterns by the Direction Card.

Shade No. 908 Width 36 inch Est. 6⅛ yds

Skirt: Front of skirt 2063
2-piece Back 2516
Fly
Jacket: 2-piece Front 2 cuts } 2119
Back gore }
1st part of Back 2119 X
2 Collars bias 2117
2 Sleeves 2007
Yoke 461
2 Bias pieces 6 × 15

TRIMMING CARD.

Style No. 2538

LINING.

Shade No. Width Est.

Foundation Front Facing
Canvas collar cloth pattern

8 strips Seam binding in Jacket
4 strips " " " Skirt

that are furnished to the operator or tailor ready made. Combinations is a term used to cover all kinds of cloth different from that which constitutes the main part of the garment (excepting linings and canvas), as well as trimmings, ribbons, laces, etc., that require the cutting out of material from patterns. Trimming girls earn from $4 to $15 per week.

VERIFYING SPECIFICATIONS.—The first work of the cutter is to take the direction card, cutting ticket, and piece goods supplied by the stock boy, and verify the number of yards of cloth required as specified on the direction card. This is done by laying out on the goods the pattern for size 36. The narrowest piece of goods is selected for this test in order to avoid any difficulty caused by variation in width, which may be due to unequal shrinkage or to lack of uniformity in the run of the mill. Stock boys earn from $5 to $15

SAMPLE OF CUTTING TICKET, SHOWING STYLE, SIZES, AND QUANTITIES OF GARMENTS TO BE MADE.

Date Feb 19			Style No.			Order No.		
Date Cut Feb 21			4002			1270		
Cutter 18								

SIZES	SHADE 643	SHADE 644	SHADE 645	SHADE 646	SHADE 670	SHADE	SHADE	SHADE	REMARKS
14			1						
16	1	1	1	1					
18	1	1	1	1	1				
30									
32									
34	1		1	1	1				
36		1	1	2					
38	1		1	1	1				
40		1							
42	1								
44		1							
46									

per week. This work frequently leads to a position as cloth buyer, in charge of the cloth department, paying sometimes as much as $40 to $50 per week.

If the specifications are correct, the work of marking and cutting proceeds. Suits are usually marked out and cut one size at a time; but if there is plenty of table room available, two or more sizes may be marked out at the same time.

MARKER, LAYING UP.—The pattern is marked out on the cloth with chalk and a piece of goods of the required length is cut off. This piece of goods with the pattern drawn on it is called the marker. The cutter then lays up the cloth to a number of thicknesses of this length, places the marker on top, and cuts all at one time. On special orders or garments the cloth is frequently, if not generally, cut one thickness at a time. When garments are made in quantities,

SAMPLE OF CALCULATION SLIP FOR FIGURING MANUFACTURING COST OF GARMENT.

Number 4002

Shade 646

YDS	MATERIAL	PRICE	TOTAL
4	Cloth	1 10	4.40
2	Silk	90	1.80
1/6	Satin	3 00	.50
	Velvet		
	Quilting		
1/2	Farm Satin	12	.06
	Foundation		
2	Canvas	13	.26
	Lining		
3	Button Holes	02	.06
	Buttons Small		
3	Buttons Large	1 44	.03
	Braid		
	Braiding		
	Ornaments		
1	Lace Wide	15	.15
	" Narrow		
	Gimp Wide		
	" Narrow		
	Ribbon Wide		
	" Narrow		
	Fur		
	Cutting & Pressing	1 50	1.50
	Sundries	25	.25
	Making	5 25	5.25
			14.26

and the work is done up to the capacity of the tools used, from 15 to 40 or more thicknesses of cloth may be cut at one time—depending on the weight and quality of the goods.

TRIMMER.—After the cloth cutter has finished his work the cutting ticket is turned over to the trimmer who cuts out the linings and combinations.

CANVAS CUTTER.—While this is being done the canvas cutter is cutting out the canvas or buckram (or other material used for interlining), which is used for the stiffening in the collar, front, cuffs, etc. This work is the least skilled of the cutting and it is here that the beginner usually gets his start.

ASSORTER.—When the garments are cut out in sizes they are sent to the assorter, who assembles the pieces according to the system used in the house. In some cases the assembling is done by single garments, in others by lots. The bundles are then ready for the foreman tailor. The assorting is usually done by girls, and the wages paid range from $10 to $15 per week, depending upon the skill and speed of the individual. It is important that the assorting be done accurately in order not to get the different garments, sizes, and styles mixed in the bundles.

With reference to the work of the cutters, it may be said further that a good trimmer is usually a good cloth cutter, and vice versa, so that these classes of employees are interchangeable when the requirements of the work make it desirable. In some of the large houses, also, there is more subdivision of labor among the cutters than would be inferred from the foregoing description. The work of cloth cutting, for example, is sometimes divided so that one man does the "laying up" of the goods, another the "marking," while others do the cutting.

SPECIAL ORDER CUTTERS.—The foreman cutter, when he does not give his entire time to supervising the work of the cutting shop, sometimes cuts out special orders, though some houses have special order cutters to take care of this work. A reproduction of a special order slip is given herewith.

The cutters are in a sense the aristocracy of the industry, earning higher wages per week than other week workers and possessing generally greater intelligence and skill. This particular division of the industry has been Americanized to a greater extent than any other. Only among the cutters are there to be found any considerable number of American-born English-speaking workmen.

TOOLS.—The tools used in the actual work of cutting are: Shears, which may be used when 2 to 4 thicknesses of cloth are to be cut at one time; the short knife, for cutting from 3 to 4 thicknesses up to 8 or 10; the long knife, for cutting more than 8 or 10 thicknesses; and the electric machine cutter.

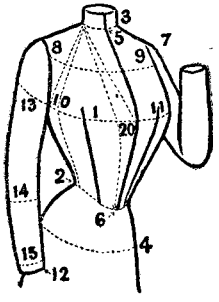
The machine cutter is used where the volume of work and quality of material are such as to warrant it. The machines cut any number of thicknesses of cloth up to their capacity, from a pile 1½ to 3 inches thick for those driving rotary knives up to 8 or 9 inches for the larger sizes of machines with oscillating knives.

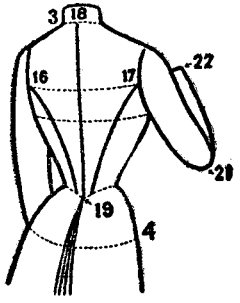
OWNERSHIP OF TOOLS.—With the exception of the machine cutters, the shears and knives used are the property of the worker and must be kept in repair and sharpened by him. The advantage of the

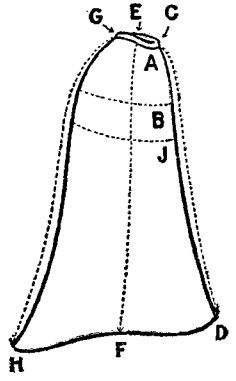
SPECIAL ORDER SLIP.

Date Feb 19	Cutter 14	Order 1269

STYLE 4002 SHADE 646







JACKET MEASURE		Skirt Measure
3-3 Around Neck	10-2 Side Under Arm	A to A—Around Waist 24
8-9 Across Chest	7-3 Length of Shoulder	B. to B.— " Hips 6 inches below Waist 38
10-11 Across Bust	10-10 Armhole	
11-1 Around Bust 36	13 Arm Muscle	J. to J—Around Hips 9 inches below Waist
2-2 Around Waist	14 Around arm below Elbow	
4-4 Around Hips	15 " wrist	C to D Length Front, 37
5-6 Length of Waist in front	16-17 Across back	E to F " Left Side 37½ " Right 37½
18-20 Back of Neck to Center Bust	18-19 Length of Waist in back	
18-6 " " " " Front of Waist	17-21 Shoulder to Elbow	G to H— " Back 38
18-10 " " " " Arm Pit	21-22 Elbow to Wrist	
18-2 " " " " Waist at side	Total length front from Neck	
10-12 Inside Sleeve 17	" " back " 32	

Remarks White peau de cygne lining

Larger armhole

machine cutter is in its rapidity of operation, but a skilled cutter can also do much better and cleaner work with it than can be done by hand.

STANDARD DAY'S WORK.—The cutting out by hand of eight suits, each consisting of coat and skirt, one size at a time, one thickness at a time, is regarded by expert cutters as a standard day's work. The number of suits actually cut out in a day can be greatly increased by cutting several thicknesses at one time, due allowance being made for the time required for laying up the cloth.

SCALE OF WAGES.—The minimum weekly wages paid to cutters are as follows:

Head cutters	$30
Graders	25
Machine cutters	25
Regular cutters, on cloth	25
Lining cutters (trimmers)	25
Canvas cutters	12
Skirt cutters	21

APPRENTICESHIP.—The cutters have for some time been urging the reestablishment of an apprenticeship system, in accordance with which a beginner would serve a definite minimum period and receive definite training and instruction in the technic of the trade and ultimately attain a status as skilled mechanic that, under present conditions, is practically beyond the reach of the ordinary worker. The industry is greatly in need of a higher level of skill and efficiency among cutters as a class. The result of an effort to assist in the organization of a plan to meet this need is to be found in another part of this study.[1]

The chief source of supply of cutters for the past 10 or 15 years has been through such training as the shops have been able to give. A man would get employment in the cutting room as a helper or as a canvas cutter and receive sufficient instruction to enable him to handle the simpler processes. After acquiring a little skill and confidence (more frequently, and in larger degree, the latter), he would improve his situation both as to remuneration and kind of work by applying for work in a new shop, representing that he is capable of doing such and such kinds of work and asking to be taken on trial. Even if his efforts do not meet with complete and unqualified success, so that he is perhaps discharged at the end of the week for which he is hired, he can go to the next shop with this additional experience and with the claim that he has been employed on this kind of work. During the busy season, especially, when there is a strong demand for workers, and individual records are not carefully scrutinized, the facilities for moving about from shop to shop and gradually improving in skill and remuneration are fairly abundant. An unorganized system of this character is, however, manifestly inefficient and uneconomical in the extreme, and conserves the interests of neither the worker nor the manufacturer.

[1] See page 172.

TAILORS, LINERS, FINISHERS, OPERATORS, ETC.

Practically all of the workers who are engaged in the processes of constructing the garment, as distinguished from designing, cutting, and pressing (and excepting the sample maker, whose work has been described), are employed on a piece-rate wage basis. They constitute approximately 80 per cent of the workers in the cloak, suit, and skirt industry as at present organized.

The desire to confine this study to the lowest possible limits consistent with adequate treatment of the specific problems selected prevents an excursion at this point into the very interesting history of the struggle connected with the development of week-wage and piece-rate wage systems. For references that throw further light on this question the reader is referred to authorities cited by Webb and Stowell.[1]

SHOP CHAIRMAN.—Before proceeding to a discussion of the occupations in this division of the industry, it may be said that the piece-workers in each shop have a simple form of organization for the purpose of dealing collectively, rather than individually, with the employer. This organization provides for a shop chairman and a price committee. The shop chairman is elected at a regular meeting of the shop force. There is no designated term of office, and reelection during satisfactory service is the usual thing. The workers in each shop may hold a meeting at any time at the call of the chairman for the consideration of matters of interest, or at the call of the business agent of the union to receive communications or instructions. These meetings are held in the evenings in halls rented for the purpose by the unions, and assigned in accordance with a booking arrangement which is under the direction of the complaint clerk in each district.

One of the important functions of the shop chairman is to take charge of the bundles of cloth which are to be made up into garments, as they come from the cutting room, and distribute the work to the employees. This prerogative has been taken over by representatives of the workers in this manner, by mutual understanding with the employers, in order to minimize the possibility of unfair discrimination among the workers, which formerly constituted a prolific source of discontent.

In a shop, for example, a quantity of garments are to be made; for some of these the tailor is to receive $10 for the labor of making, for others $7.50, and for others $5. It may be understood, even by the novice (though it is not easily explained), that the tailor can earn money faster by working on the $10 garments than on those at $5.

[1] Webb: History of Trade Unionism; also Seasonal Trades; Longmans, New York.
Stowell: Studies in Trade Unionism in the Custom Tailoring Trade; published by Journeymen Tailors' Union of America, Bloomington, Ill.

Consequently if, in the distribution of the work, one tailor gets only $10 garments to make, and another only $5 garments, dissatisfaction is bound to arise. On the other hand, the tailors in a shop are not all of equal skill, so that a mere arithmetical distribution of all grades of garments will not satisfy the manufacturer, who insists that the higher grades of work shall go only to mechanics who are able to do the work properly.

The manufacturer, therefore, reserves the right to refuse payment for garments that do not meet the test of inspection for quality of workmanship; and in this way his interests are taken care of. The interests of the workers are provided for by this method of supervising the distribution of the bundles of work through their own representative. If for any reason they are dissatisfied with the way in which this task is performed, the remedy lies in their own hands—the election of a new chairman.

For the service thus rendered, the shop chairman is, in many instances, remunerated by a small weekly assessment levied upon all the pieceworkers in the shop.

PRICE COMMITTEE.—The shop organization includes also a price committee, of which the shop chairman is a member. Whenever the manufacture of a new style is begun, a sample garment is made as already described, the price committee meets with a representative of the firm, and a piece price for the labor is agreed upon. The price thus settled holds for the season. The committee usually consists of three persons, but in large shops there may be five or more members.

The psychology of the conference on prices offers an interesting problem for further study. The manufacturer always names a price lower than he is willing to pay, and the price committee names a figure higher than it hopes to receive, and the final compromise is reached by a process of haggling, and even browbeating, that to an outsider is somewhat puzzling. Why it should always be so is not easy to explain, but no matter how closely similar this garment may be to one made last season for $9, the price asked now is $13, and there is only one way apparently of reaching a settlement.

SYSTEMS OF TAILORING.—Coming now to a description of the occupations, there are two distinct methods of conducting the shops in which the tailoring work is done. By the first method, the garments are made by piece tailors, assisted by liners; by the second, the garments are made by finishers and operators, assisted by liners.

The question as to whether a given garment shall be made by the first plan or the second is not decided by a choice as between two plans equally appropriate, nor by the preference of the manufacturer for one type of shop organization as compared with the other. The

method of making is determined by the character of the garment itself, and the distinction between those that must be made by the first method and those that can be made by the second is not easy of explanation. The difference is partly a matter of quality or grade of garment, the higher grades requiring the skilled tailor even on the machine work, and partly a matter of elaborateness of style and construction. A garment whose construction requires hand skill beyond a certain rather indefinable point must be made by a tailor; a garment requiring less skill may be made by a finisher and an operator; in each case a liner usually assists, as indicated hereafter.

TAILORS AND LINERS.—In this system the bundles of cloth are distributed to the tailors, who are held responsible for the quality of the work turned out and who perform all the work of making the completed garment except the pressing. The work of inserting the lining and felling the edges, however, requires considerably less skill than the other processes, so that it is almost a universal practice in this industry for tailors to employ liners to assist them in this part of the work. This arrangement is a form of subcontracting, in that the liners are employed by the tailors and not by the firm.

Much of the lining is done by women, whose quickness and deftness enable them to line a garment in perhaps half the time that would be required by the tailor. Many of the liners also are superannuated tailors and men who are not skilled enough to secure employment as tailors.

A capable woman will put the linings into 10 garments in a day, whereas the tailor may be able to complete only 2; consequently several tailors are required in order to supply one liner with work. Since no single tailor can provide the liner with enough work to insure a living wage, and since the manufacturer assumes no responsibility in the matter, the position of the liner in the system is always a precarious one.

WAGES.—Since the work is paid for at piece rates, the wages of the tailor vary with his skill, as well as with the seasonal fluctuations of the industry and the amount and character of the work offered him to do. With the tailor, as with the cutter and the manufacturer himself, the question of the duplication of garments affects economy of production. The manufacturer makes more money if he sells in large lots; the labor of cutting 6 or 8 garments at once is practically the same as in cutting one, and the tailor can turn out work faster and earn more money, other things being equal, by making 10 garments of one style than he can by making 2 of one style, 3 of another, and 5 of another.

Tailors, liners, and finishers usually belong to the same unions. The average weekly earnings of skilled tailors during the busy season are reported at $30 to $40.

FINISHERS, OPERATORS, AND LINERS.—In this system the bundles of cloth go first to the finishers, who baste the different parts of the garment together. The different pieces of cloth are first basted on to a foundation of canvas or some kind of interlining and then the parts are basted together so that the seams can be run. Operators then sew the seams on power-driven sewing machines, after which the garments are returned to the finishers. The operator is held responsible for the machine work on the garment, and the finisher for the handwork.

Finishers are usually assisted by liners, as is the case with the tailors in the first system, and in many shops there is a still further subdivision of labor in the employment of an unskilled group of workers, usually girls, who pull out basting threads, attach hooks and eyes, sew on buttons, rosettes, and other ready-made ornaments or trimmings.

For the reason that has been suggested in a previous paragraph, the finisher ordinarily possesses less mechanical skill than the piece tailor, but more than the liner. The operating of the sewing machine is not regarded as requiring a high degree of skill, though the demand varies with the grade of the product and the shop. It is asserted that an ordinarily intelligent adult can, in three months, master the processes sufficiently to enable him to earn a living wage as an operator at the prevailing piece rates, whereas most of the tailors now at work in the industry began to learn the trade as young boys in the European countries from which they have come.

IMPORTANCE OF THE OPERATOR.—In respect to these methods of manufacture the industry has undergone certain radical changes during the past 10 to 20 years. Formerly the operator was the most important factor in the production of the garment. It was customary for a firm to employ operators only, who in turn hired finishers to assist them, responsible only to themselves. Gradually, however, the work of the operator has become relatively less skilled and less important and that of the finisher more so, until at the present time the operator is probably entitled to credit for not more than one-fourth to one-half of the effort and skill that go into the production of the garment after it leaves the cutter's hands.

There is another class of skilled work that is done by the foreman or the assistant foreman, which includes the locating of belts, laps, vests, false pockets, etc. These parts are attached to the garment in their proper places by pins. The finishers then sew them on and remove the pins.

BUTTONHOLE MAKER.—The foreman also indicates on each garment the location of the buttonholes by means of chalk marks, and the work is done on a machine by a buttonhole maker, who comes in from the outside for this special purpose. The buttonhole maker usually owns a machine in each of several shops and makes the rounds from one to the other cleaning up the work that has accumulated for him at each place. Several hundred buttonholes can be made in the course of a few hours. This work is paid for at an agreed price per hundred.

Elaborate or fancy buttonholes that can not be made by machine are made by hand by girls who are paid an agreed price per piece.

BUSHELER.—The busheler, or bushelman, in the high-grade shops is an expert tailor, usually the assistant foreman, whose work it is to examine the garments after the final pressing to see that the workmanship is up to the standard and to see that nothing has been overlooked. If the garment passes this inspection it is sent to the stock room or to the shipping room. There are shops, however, in which the busheler is not a skilled tailor, but is assigned to an inferior grade of work. The busheler, or inspector, on high-grade work usually has the assistance of a model for trying on garments before final approval.

DRAPER GIRL.—A dress is a garment consisting of waist and skirt fastened together, as distinguished from a suit, which consists of two pieces, a coat or jacket, and a skirt. In the manufacture of a dress it is necessary to fasten the waist and skirt together in such a way as to secure the proper fit and hang of the completed garment in order that the operator may sew the seams correctly. This work is done by draper girls, who hang the parts of the garment on a dummy figure and fasten them together with pins. These girls are also called pinners and joiners. They earn from $12 to $18 per week, according to their experience and ability and the grade of the output. Very little instruction is necessary in order to make a beginning at pinning the simpler garments, and progress to more difficult and better-paid work is largely a matter of experience and individual aptitude.

CLEANER.—After the finisher or tailor has completed his work on a garment it goes to a cleaner, who picks off the loose threads, etc., before the garment is sent to the upper presser for the final pressing. The girls who do this work earn from $6 to $9 per week.

FACTORY TICKET.—Each garment has a conspicuous label or factory ticket attached to it, containing a separate coupon for operator, finisher, and sometimes presser. Each employee who performs any work upon the garment enters his number in the appropriate blank space in order that any defect or damage may be traced and also in order that proper credit may be given for work turned out. Only

one operator, one presser, and one finisher perform any work upon a single garment. In some shops a factory ticket without coupons is used. Following are given samples of these labels or tickets.

SAMPLES OF LABELS OR FACTORY TICKETS, WITH AND WITHOUT COUPONS.

Tailor Made

Spec. No..... No. 32050
Style.....
Cloth.....
Size.....
Operator.....
Finisher.....
Ship.....
Index.....

No Work will be paid for until Checked and Examined.

I. R. | **Finisher** | No. 32050 Style..... Size..... Cloth..... | I. R.

No Work will be paid for until Checked and Examined

I. R. | **Operator** | No. 32050 Style..... Size..... Cloth..... | I. R.

Matching No.	3202
Order No.	1714
Size	38
Style No.	3002
Cutter	I. Cohen

JACKETS

REMARKS:
Operator 29
Finisher 40

Matching No.	3202
Order No.	1714
Size	38
Style No.	3002
Cutter	Shapiro

SKIRTS.

REMARKS:
Operator 27
Finisher 6

SKIRTS

I. R. | Spec. No. 32050 Style..... Cloth..... Size..... Tailor..... Ship..... Index..... | I. R.

No Work will be paid for until Checked and Examined

SKIRT BASTERS AND FINISHERS.—Tailors, operators, and finishers are divided into two distinct classes, those who work on jackets or coats, and those who work on skirts. The two kinds of work are

quite different in respect to the amount of skill required and, of course, the number of garments produced in a given time. The work of the skirt baster and skirt finisher is of lower grade, requires less skill, is lower paid, and is further differentiated from that of the other employees mentioned by being put upon a week basis. Most of the tailors and operators are men, while about 50 per cent of the finishers, as well as skirt basters and skirt finishers, are women and girls.

SAMPLE MAKERS.—Sample makers are men chosen from among the more skillful tailors, who work under the immediate direction of the designer making one original sample garment from each pattern created. This work is done at week wages while it lasts, after which the men return to the status of tailors, at piecework.

SAMPLE LINER.—The sample liner is a finisher who assists the sample maker by inserting the linings in the garments upon which he works. Lining is a distinct division of the work, and, as has been pointed out, can be performed by cheaper labor in a great many cases. There are some shops, however, making a high-grade product, where the lining is regarded as of equal importance with the other processes, and in such shops the sample maker is not permitted to turn this work over to an inferior workman.

WAGES.—Tailors and operators earn from $30 to $40 per week during the busy season, while finishers earn about $20 per week. During the time that the tailor works as a sample maker he is paid from $22 to $30 per week. Skirt basters, on the week basis, are paid $14 per week, and skirt finishers, $10.

EQUIPMENT.—According to Paragraph VIII of the contract shop agreement which is in force in a number of establishments, "The firm is to furnish to all employees, free of charge, sewing machines driven by electric power, which are to be in charge of competent machinists, and all requisites for work, such as needles, cotton, silk, oil, straps, etc."

PRESSERS.

PIECE PRESSERS.—As soon as the operator or tailor begins his work of putting together the various parts of a garment, the assistance of a presser is required to press out the seams as the work progresses, and also to press out various parts of the garment as they are completed, such as sleeves, pockets, collars, cuffs, belts, etc. This is the work of the part presser, or piece presser, who is the least skilled of all the pressers.

UNDER PRESSER.—The work is then returned to the operator after pressing. After the garment has been put together by the operator it goes to the under presser, who presses out the seams, etc., before the lining is inserted. This pressing is, of course, done principally on the inside, or the underside, of the garment. In shops where

piece pressers are not employed the garment goes from the operator to the under presser and back again a second time before the completion of the tailoring work.

UPPER PRESSER.—The final pressing of the finished garment is done by the upper presser, or up presser, and requires more skill than any of the preceding pressings. In shops where the cheaper grades of clothing are manufactured the pressing is depended upon to produce a considerable proportion of the shaping or molding of the garments.

CLASSIFICATION AND SCALE.—Pressers are further divided into classes according to the garments upon which they work. There are upper pressers and under pressers for skirts, upper pressers and under pressers for jackets, for reefers—that is, children's clothing—and for dresses—that is, one-piece suits. There are but a very few houses in this industry making dresses, however; these are made principally by houses in the dress and waist industry.

The following is a list of the classes into which pressers are divided, and the minimum weekly wages paid:

Head pressers	$21
Jacket upper pressers	21
Jacket under pressers	18
Skirt upper pressers	19
Skirt under pressers	15
Dress upper pressers	New.
Dress under pressers	New.
Reefer upper pressers	18
Reefer under pressers	14
Piece pressers	13

DISTRIBUTION.—Estimates by union officials and employers place the proportions of the various classes of pressers employed in the industry as follows:

	Per cent.
Jacket and reefer upper pressers	42
Jacket and reefer under pressers	25
Skirt upper pressers	10
Skirt under pressers	20
Part pressers	3
	100

APPRENTICESHIP.—There is no apprenticeship system in this division of the industry, though employment as a part presser serves this purpose to a degree. There is practically no control exercised over the conditions under which an applicant may engage in the occupation.

Men usually begin as piece pressers, where the least skill is required. Many individuals have made a start in the small places where cleaning and pressing work is done. After equipping himself with whatever

degree of skill is obtainable at this kind of work, the man applies to some new shop for employment as an under presser at a time when the demand for workers is good. In a similar manner he later works in as an upper presser.

QUALIFICATIONS FOR UNION MEMBERSHIP.—There is no general rule about the length of service necessary for a presser to secure the higher grades of work and pay. In general, promotion from one grade to another in the same shop is difficult to secure. When a presser feels that he has the requisite skill and experience he applies at a new shop for work at the higher scale. From one to two years is usually required in order to reach the status of an upper presser. If a man can secure employment at the regular scale for any grade he is accepted by the unions for membership.

EXAMINATION.—Aside from this method of qualifying for membership the unions provide an examination in which they require the candidate to demonstrate his ability to do the work before admitting him to membership. One union, Local No. 35, which maintains a system of sick benefits, requires also that the candidates pass successfully the medical examination given by the joint board of sanitary control.

COMPARISON OF PRESSERS.—The larger number of jacket pressers required in the industry, as compared with skirt pressers, is explained partly by the fact that in the manufacture of a suit the pressing of the jacket usually takes more time than the pressing of the skirt. Roughly speaking, it may be said that, with workers of equal skill, two skirts can be pressed in the time required for one jacket. The length of time varies considerably with the shop and the character of the output.

In the shops of the high-class manufacturers it is not easy for the worker to learn new processes, and thus to progress from a lower grade of work to a higher. On the other hand, there are some shops in which upper pressers are employed to do the under pressing at the same scale of wages as the upper pressing, in order to secure the better quality of workmanship.

EQUIPMENT.—The necessary equipment is furnished by the employer, and consists of irons, cloths, sponges, and a variety of ironing boards and pads. These latter include the principal pressing board, or buck; the shoulder pad, and breast pad, which are placed on the buck to assist in the pressing of these parts of the garment; the sleeve pillow, which is inserted in the sleeve during the pressing; and the flattener, a block of wood.

The irons are heated by a combination of gas and compressed air, and in a few shops by electricity.

COMPARATIVE STUDY OF PRESSERS AND CUTTERS.

The most promising point at which to make a more intensive study of occupations in this industry seemed to be a comparison between pressers and cutters, for the following reasons:

1. Pressers and cutters are the two largest groups of workers who are paid on a week-wage basis instead of a piecework basis. Having this characteristic in common, and being by it differentiated roughly from the remaining mass of workers, they constitute convenient units for investigation.

2. Estimates based on the membership records of the unions place the number of pressers and cutters at 8,000 to 10,000 in each occupation, out of a total of 50,000 to 60,000 for the cloak, suit, and skirt industry in Greater New York. It is evident, therefore, that these two groups taken together constitute a very important fraction of the total number of workers.

3. The preliminary and more superficial investigation was sufficient to disclose certain distinguishing characteristics which of themselves invite more careful study. Among these may be mentioned the difference between the two groups of workers in the degree to which they have yielded to influences that may be described as "Americanizing."

4. The preliminary investigation seemed to indicate, further, that in one of these occupations would be found the most favorable opportunity for beginning such an analysis as might lead to the formulation of plans for securing greater efficiency, and hence greater earning capacity, for the workers through appropriate industrial education or apprenticeship plans. In the case of the cutters, indeed, some consideration had been given to the possibility of reviving in a modified form the apprenticeship system that had been in operation in the trade in former years. While it is true that an apprenticeship system to meet present needs must be radically different from one that might have served the purpose twenty or more years ago, still, in a sense, it is a question of restoring an institution that has fallen into decay quite as much as it is of organizing new machinery to deal with new conditions.

5. Finally, a very important reason for selecting these two occupations for further intensive study is found in the fact that the pressers and cutters, more than any other groups in the industry, have taken the initiative in intelligent and aggressive study of their own economic and industrial status. The interest of the cutters in a revival or reorganization of an effective apprenticeship scheme has been already referred to. The pressers, especially those of Local No. 35, have inaugurated a comprehensive system of individual card records that in the course of a few years will yield invaluable data for the study of the occupation. The records now being compiled

include details as to actual weekly and annual earnings under the conditions of seasonal fluctuations, earning capacity, conditions relating to the health and efficiency of the individual worker, etc. The pressers are cooperating with the director of the joint board of sanitary control, in a careful analysis and study of diseases, and especially occupational diseases, among their own membership, and are attempting to develop methods of increasing individual efficiency through the raising of standards of living, schemes of social insurance, and the like. Local No. 35 is unique, apparently, among the unions in having established a tuberculosis benefit fund for members, which it is using as an argument for demanding physical examination of candidates for membership.[1]

It may be appropriate to note in this connection that the joint board of sanitary control is establishing an industrial clinic for the purpose of facilitating a more intensive study of occupational diseases and hygiene in this industry than has been possible hitherto. By means of a number of instruments which are now being perfected it is proposed to conduct examinations in the shops, including tests of blood pressure, rate of respiration, circulation, and other tests, before work, during working hours, and after the day's work is ended. The advantages, to the individual and to society, of such industrial studies as these can hardly be overestimated.

MOBILITY OF THE WORKERS.[2]

The first attempt to make an intensive study of cutters and pressers concerned itself with the problem of the mobility of the workers. The primary object of the general investigation in the industry was to ascertain the facts as to the earnings of workers who are paid on a week-wage basis, as distinguished from those paid on a piece-rate wage basis. Examination of factory pay rolls disclosed the names of large numbers of workers who were employed only a portion of the time in any single factory. In order to secure complete individual histories, therefore, it was necessary to piece together the periods of employment in the different factories concerned.

The attempt to secure the necessary data on which to base this study did not meet with the success anticipated, but the results are presented here for what they are worth. When the investigator visited a factory for the purpose of taking the information from the pay rolls, he supplied the shop chairman with a quantity of schedules with the request that he secure from each week worker, in addition to the necessary identification data, a list of all the shops in which he had done any work during the year under consideration, August 1, 1912, to August 1, 1913.

[1] Third Annual Report, Joint Board of Sanitary Control, in the Cloak, Suit, and Skirt, and Dress and Waist Industries of Greater New York, December, 1913; 31 Union Square West, New York, N. Y.

[2] In the prosecution of this inquiry the writer was assisted by Mr. Boris Emmette.

The obstacles encountered in the carrying out of this plan, which need not be detailed here, and the pressure of other work, led to its abandonment after several weeks of effort. Schedules were secured for 1,429 males and 86 females.

TABLE A.—NUMBER AND PER CENT OF MALE WORKERS EMPLOYED IN EACH SPECIFIED NUMBER OF SHOPS DURING THE YEAR AUGUST 1, 1912, TO JULY 31, 1913, BY OCCUPATIONS.

Number of shops in which employed during year.	Males who worked in each specified number of shops during the year.									
	All occupations.		Pressers.		Tailors.		Cutters.		Finishers.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1	976	68.30	565	72.90	141	72.31	246	56.68	24	96.00
2	269	18.82	157	20.26	29	14.87	82	18.89	1	4.00
3	104	7.28	38	4.90	19	9.74	47	10.83	.....	.....
4	45	3.15	13	1.68	3	1.54	29	6.68	.....	.....
5	22	1.54	2	.26	.....	.....	20	4.61	.....	.....
6	7	.49	.....	.....	2	1.03	5	1.15	.....	.....
7	1	.07	.....	.....	1	.51	.....	.....	.....	.....
8	3	.21	.....	.....	.....	.....	3	.69	.....	.....
9	2	.14	.....	.....	.....	.....	2	.46	.....	.....
Total	1,429	100.00	775	100.00	195	100.00	434	100.00	25	100.00

Table A shows the distribution of males according to the number of shops worked in during the year, from which it appears that 976, or 68.30 per cent, were employed in one shop only. It is believed that if all the facts were available the percentage of those working in one shop only would probably be somewhat diminished, since the absence of an entry in the appropriate place on the schedule may mean either that there was nothing to report or that there was unwillingness or inability to give the information. The item on the schedule was a request for the "names of all other shops in which you have worked since August 1, 1912."

Disregarding the small number of finishers, the cutters seem to be at a disadvantage in the amount of migration experienced as compared with pressers and tailors, for only 56.68 per cent of the cutters worked in one shop only, as against 72.90 per cent of pressers and 72.31 per cent of tailors. Considering those who were forced to find work in three or more shops during the year, the differences are even greater. The figures are: Cutters, 106 out of 434, or 24.42 per cent; tailors, 25 out of 195, or 12.82 per cent; pressers, 53 out of 775, or 6.84 per cent.

TABLE B.—NUMBER AND PER CENT OF FEMALE WORKERS EMPLOYED IN EACH SPECIFIED NUMBER OF SHOPS DURING THE YEAR AUGUST 1, 1912, TO JULY 1, 1913, BY OCCUPATIONS.

Number of shops in which employed during year.	Females who worked in each specified number of shops during the year.									
	All occupations.		Skirt finishers.		Basters.		Cleaners.		Examiners.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1	64	74.42	50	72.46	11	78.57	2	100	1	100
2	21	24.42	18	26.09	3	21.43	.....	.....	.....	.....
3	1	1.16	1	1.45	.....	.....	.....	.....	.....	.....
Total	86	100.00	69	100.00	14	100.00	2	100	1	100

Table B shows the corresponding figures for the female workers studied. The facts presented hardly justify comparisons among the occupations represented in Table B, but the comparison between males and females, Table A and Table B, seems to be of some significance. The male workers move about from shop to shop much more than the female workers.

The unsatisfactory nature of the data collected by the plan just referred to led to an effort to secure in a number of individual cases more complete records. For this purpose a selection was made of 34 cutters and 34 pressers, and a further study undertaken through personal interviews.

The individuals to be studied were selected at random from several thousand schedules collected in the course of the wage inquiry. For convenience only schedules bearing names that were easily traceable were chosen. Some of the workers were induced to visit the office of the board of arbitration, and the remainder were interviewed at union headquarters.

The inquiry was continued until 34 cutters and 34 pressers were found who could give complete records for the 52 weeks. In no case was such a record secured without much patient checking and comparing. A great deal of difficulty was experienced in recalling names of employers, and periods and dates of employment, even though there was apparent willingness to furnish the desired information. In many cases the workers did not know the meanings of the English names for the calendar months, and were able to recall experiences only by connecting them with the month in which some holiday occurred, or some religious festival or other notable event.

One of the best records, for example, was that of a presser who produced a record in writing of all his earnings. He gave the names and addresses of the people for whom he had worked during the year. Subsequently the records of these firms were secured and comparisons made. The dates were found to be badly mixed up, and considerable effort was required to straighten them out.

TABLE C.—MOBILITY OF 34 CUTTERS AND 34 PRESSERS DURING ONE YEAR.

Number of shops.	Number of cutters.	Number of pressers.	Number of shops.	Number of cutters.	Number of pressers.
1	5	12	8	1	.....
2	4	11	9	1	.....
3	5	4	10	.....	1
4	4	.....	No report	3	5
5	4	1			
6	5	.....	Total	34	34
7	2	.....			

Table C shows a marked difference in the amount of moving about from shop to shop, in favor of the pressers. Twenty-three pressers worked in only one or two shops during the year, as compared with 9 cutters. But that this tells only a part of the story is evident from a comparison of the amount of unemployment.

Of the 5 cutters who worked in one shop only, for example, 2 reported 22 weeks each of idleness, and 1 was idle for 6 weeks. Of the 12 pressers who worked in one shop only, 1 reported 36 weeks of idleness, 2 reported 27 weeks each, and 3 reported 1, 3, and 22 weeks, respectively.

TABLE D.—UNEMPLOYMENT REPORTED BY 34 CUTTERS AND 34 PRESSERS.

Number of weeks.	Number of cutters.	Number of pressers.	Number of weeks.	Number of cutters.	Number of pressers.
1 to 4	2	2	29 to 32	4	7
5 to 8	1	1	33 to 36	.....	.....
9 to 12	1	2	37 to 40	.....	2
13 to 16	6	3	No report	5	4
17 to 20	6	7			
21 to 24	5	3	Total	34	34
25 to 28	4	3			

From Table D it appears that for cutters the periods of idleness range in length from 1 to 32 weeks, one-half of the cases falling in the groups from 13 to 24 weeks. For pressers the periods range in length from 1 to 40 weeks, more than half of the cases (20) falling in the groups from 17 to 32 weeks. From this point of view a considerable part of the apparent advantage in mobility in favor of the pressers disappears.

TABLE E.—NUMBER OF PERIODS OF UNEMPLOYMENT REPORTED BY 34 CUTTERS AND 34 PRESSERS.

Number of periods.	Number of cutters.	Number of pressers.	Number of periods.	Number of cutters.	Number of pressers.
1	5	6	6	.....	1
2	4	9	No report	5	7
3	16	11			
4	3	.....	Total	34	34
5	1	.....			

A comparison between cutters and pressers in the number of periods of unemployment reported, Table E, shows little difference between the occupations.

USE MADE OF PERIODS OF UNEMPLOYMENT.

Most of the cutters, according to their statements, spent the periods of unemployment in idleness. One reported that he "was helping out his father"; one was employed at clerical work; three worked on raincoats; one worked on shirtwaists; three obtained work as salesmen in retail stores; and one was employed as a traveling salesman.

Two pressers reported having endeavored to earn a living at "peddling" while out of employment in this industry; one worked at "odd jobs"; two worked for contractors at irregular intervals; one found employment at pressing at piecework; one worked in a store. The rest reported having spent the time in idleness. Two of these, when asked how they managed to live, said that their wives took in washing.

The fact that 24 cutters and 27 pressers (out of 34 individuals in each group) reported inability to find employment when thrown out of their positions in this industry seems to be the most striking contribution of this study. It is impossible to say whether organized and cooperative effort would provide employment in other industries for any considerable number of the surplus workers of this industry during the dull seasons. But so far as this hasty and superficial glance at the situation shows anything, it is that under existing conditions there is very little of this transfer of activities.

Without question the inquiry described in the preceding pages should be carried further. If undertaken with more time and more ample facilities than were available when this work was attempted, and on a scale sufficiently large to justify the drawing of conclusions from the findings, such a study would be most fruitful of results.

METHOD USED IN THIS STUDY.

It was decided to make a selection of 100 pressers and 100 cutters, and to secure from each individual certain significant facts concerning his history. For convenience in recording and handling the desired data, printed schedules were prepared with blanks to be filled in. The following form of schedule was used:

INQUIRY BLANK: EMPLOYEES.

1. Name..... Male.... Female....
2. Home address.....
3. Place of birth.....
4. Year of birth.....

5. Single..... Married.....
6. Came to the United States in..... (year).
7. Member of what union.....
8. Union card No. .....
9. Present occupation.....
10. Employed by.....
11. Business address.....
12. Record of work done:
    1912 worked as.....at $.....per week.
    1911 worked as.....at $.....per week.
13. Began to work at ..... years of age as.....at $..... per week, in.....
14. Method of learning trade.....
    (a) Learned from other members of family.....
    (b) Served apprenticeship, of about ..... years, in.....
    (c) Learned in trade or technical school, in.....
    (d) Worked as helper .....in.....
    (e) .....
15. Amount of schooling:
    (a) Attended public school about ..... years, in.....
    (b) Attended high school, college, *gymnasium*, etc., about .....years, in.....
    (c) Attended private school about ..... years, in.....
    (d) Attended evening school about ..... years, in.....
16. Languages you can speak.....
17. Languages you can read.....
18. Languages you can write.....

Since it was known in advance that a considerable number of men would be found unable to speak English, several assistants were chosen having speaking knowledge of Yiddish, Russian, or German. These assistants were chosen from the staff of investigators employed by the board of arbitration, and were carefully instructed as to the purpose of the study and the use of the schedule. Care was taken to secure uniform interpretation of the various matters inquired into, so far as possible. All of these assistants had had several months' experience in other phases of the investigation conducted by the board of arbitration, and hence were thoroughly conversant with the conditions which it was proposed to study.

The schedules were taken during the month of January, 1914. By previous arrangement in each case, the officials very kindly reserved a room, equipped with tables and chairs, at the union headquarters for the use of the investigators. Each investigator sat at a table, with a chair at his side for the workman to be interviewed. The writer of this report was personally assisted by an officer of the union who acted as an interpreter when necessary.

The desired information was secured by individual conferences, all of the writing on the schedules being done by the investigators. It was thus possible to pursue any given point by question and answer until it was reasonably certain, first, that the subject understood the question, and, second, that the interviewer understood the

answer. Individuals were admitted to the room one at a time to each investigator, so that the work proceeded expeditiously and without interruption. On the other hand, it was possible to take as much time for each individual case as was deemed necessary.

The basis of selection is, of course, a very important matter when a study of several thousand men is undertaken through a scrutiny of 100 individuals. It is believed that the conditions under which this work was done insure a random and fairly representative sampling. These conditions may be outlined as follows:

1. The workers were sought at their union headquarters where they are accustomed to congregate.

2. The days of the week and the hours for the visits were chosen, after inquiry, so as to coincide with the expected presence of the largest possible numbers.

3. No attempt at selection from those who presented themselves was made. On each occasion the interviewing proceeded until there were no more men left, or, on the last day, until the required number of schedules had been secured. In each occupation 110 schedules were secured, and from these there were selected later the 200 schedules containing the most complete records, the fewest errors, omissions, etc.

4. Although appointments were made beforehand with the officers of the unions, the men themselves were not notified and had no knowledge in advance of what was being undertaken.

5. It might be objected that the individuals interviewed did not constitute a representative sampling on the ground that, being found at union headquarters during working hours, they probably included too large a proportion of those who were out of work because of inefficiency, unwillingness to work, or some other characteristic that would tend to rate them far below the standard of the whole group on certain of the points tested. It is believed that this objection is met satisfactorily by pointing out, in addition to what has been said above, that the month of January, during which the inquiry was made, marks the lower limit of one of the semiannual dull seasons characteristic of this industry. It has been estimated that during the month in question not more than 10 to 15 per cent of the pressers and cutters in the industry were employed. It can be maintained, therefore, that the unemployed at that time included representatives of all classes and degrees of efficiency, inefficiency, etc., and that it is reasonable to assume that groups found in union headquarters would be fairly representative of the occupation. This assumption appears the more tenable when it is explained that both occupations under consideration are practically 100 per cent organized in this industry in this city.

Such comparisons as may be instituted between pressers and cutters on the basis of the data presented herein are of course subject to qualification on account of the small number studied, and no proof is offered to show that a study of all individuals in these occupations would confirm the conclusions reached. On the other hand, it is believed that under the method of selection adopted the data obtained are typical and fairly represent conditions among pressers and cutters in New York City.

INDIVIDUAL RECORDS OF PRESSERS.

The following individual records will serve to indicate the character of the data secured and the way in which it was recorded, and will give an insight into certain features of the study supplementary to the statistical presentation. Entries that would lead to the identification of the individual have been eliminated, but otherwise the statements are transcribed from the original schedules with no substantial changes.

It should be noted that the conditions under which this investigation was made rendered it impracticable to refine the data relating to age, number of years in the United States, age at entering the industry, and number of years in the industry. No effort was made to ascertain the month and day of month of the events referred to. In order to secure comparable results in the tabulation, however, the schedules were all carefully edited, and the years given as "year of birth," "year of arrival in United States," etc., were uniformly subtracted from 1913, and the results noted on the schedules. The amount of labor in the actual tabulation was thus measurably reduced, as well as opportunities for errors, and the work of checking the tables was greatly facilitated.

By this method an unascertained fraction of a year is neglected in practically every case, but it is believed that the results secured are sufficiently valid and significant to justify the method by the enormous saving in time.

Concerning the thirteenth item on the schedule (p. 136), it should be said that the age at which the individual "began to work" was interpreted to mean the age at which he "entered this industry" as a cutter or presser, or as a learner or apprentice in one of these specific occupations. In the inquiry concerning the method of learning the trade, "apprenticeship" was interpreted somewhat narrowly to mean a formal, definitely organized plan of learning and teaching a trade, involving a contractual relation with mutual obligations. In this sense, as noted elsewhere, there is no apprenticeship system in either of these occupations at the present time, but it was expected that a few at least of the older men would report apprenticeship as a stage in their earlier histories. As may be seen by reference to the tables,

the great mass of the workers studied learned their trades by picking up the requisite skill "in the shop."

All of the information given was recorded upon the unsupported testimony of the individuals interviewed, and is dependent for its accuracy upon the efficiency of individual memories, perhaps upon individual willingness to give accurate information, and perhaps upon other factors. These factors should be taken into consideration in weighing the statements concerning schooling, and especially concerning facility in the use of language.

It should be explained that during the summer of 1910 the industry was completely paralyzed by a strike lasting about two months. After the settlement of the strike, in September, practically every individual in the 200 studied was earning more than before the strike. In the case of the pressers, wages were raised in October, 1913, when the board of arbitration awarded certain increases, but these latter increases are not included in the tabulations.

PRESSER No. 1.—Born in Russian Poland, in 1877; married; 3 children; came to United States in 1910, and entered the industry within a year, at the age of 33; in Russia was a bookkeeper; came to New York after the strike in 1910, learned the trade by working as a helper in a shop where he worked for 6 weeks as a learner without wages; at the end of his first year he was earning $18 per week, and during the last two years he was making $19; attended *gymnasium* in Russia about 3 years, also a commercial school on Sundays for 3 years while engaged in business; speaks Yiddish, German, Russian, Polish, and "a little" English and French; reads and writes the same languages, and also reads Hebrew.

PRESSER No. 2.—Born in Russian Poland, in 1883; single; came to United States in 1910; 3 years in United States, and 3 years in the industry; in Russia was a wood turner for 17 years; worked in London, England, for a few weeks learning to press before coming to New York; entered the industry at 27 years of age, in London, as a piece presser, earning $1 per week; in New York he secured work as a piece presser at $13 per week, and before the end of his first year was an under presser and piece presser at $16; during his second year he made $16, and the third year, $18; attended a Yiddish school in Russia for about 5 years; speaks Yiddish, Polish, Russian, German; reads and writes Yiddish, Polish, Russian.

PRESSER No. 3.—Born in Russia, in 1887; single; came to United States in 1907; worked at common labor in Newark, N. J., for several weeks, in New York as a painter for several weeks, and as operator of a street photographing machine for several months; about one year after arrival in the United States, at 21 years of age, entered the industry; learned the trade in the shop, beginning as a piece presser; worked two weeks for nothing as a learner, then 3 weeks at $3, then a

few weeks at $3.50, then a few months at $5, and by the end of his first year had worked up to $8 as an upper presser on skirts; in 1910 he was making $10, which was increased to $16 after the strike; during 1911 he was out of work, except about 3 months while he was with a circus; during 1912 he worked as a reefer upper presser at $14, and in 1913 as a jacket under presser at $18; was a railroad porter and clerk in Russia; attended a Yiddish private school in Russia for about 6 years, and evening school in New York for one year studying English; speaks, reads, and writes Russian, Yiddish, and "a little" English.

PRESSER NO. 4.—Born in Russia, in 1878; married; 2 children; worked in an envelope factory in Russia; came to the United States in 1905; in New York worked about 6 months as a waiter and dishwasher in a restaurant, and about a year in an iron works; after about 2 years in New York, entered the industry at 29 years of age, learning the trade in the shop; began as an under presser, working for 5 weeks at $4, and then for 2 years at $7; in 1910 he made $9 as under presser, but after the strike made $15 as piece presser; since 1911, under presser at $18; in Russia attended public school about 3 years, and Yiddish private school about 5 years; speaks, reads, and writes Russian, Yiddish, Hebrew, and "a little" English.

PRESSER NO. 5.—Born in Roumania, in 1861; married; 4 children; had a small business of his own in Roumania; came to United States in 1902 and entered the industry at once, at 41 years of age; began as piece presser, working 2 weeks for nothing, then for 3 months at $3 per week, then at $7; for 2 years worked at $9; by 1910 was making $12 and $13 per week, and since the strike $19 as skirt upper presser; learned the trade in the shop from other workers; attended public school about 5 years in Roumania; speaks, reads, and writes Roumanian and Yiddish.

PRESSER NO. 6.—Born in Russia, in 1874; married; 5 children; was a shoemaker in Russia; came to United States in 1904, where he was a peddler with a pushcart for about a year and a half; after about 2 years in the United States, at 32 years of age, began as skirt under presser, learning the trade in the shop; worked 2 weeks for $5 per week, then several months at $8, then a year at $12, and by 1910 was making $16, and by 1912 became a jacket upper presser at $21; attended a Yiddish private school in Russia about 6 years; speaks, reads, and writes Russian and Yiddish.

PRESSER NO. 7.—Born in Russia, in 1877; married; 3 children; was in business for himself in Russia; came to United States in 1905, entering this industry at once, at 28 years of age; learned the trade in the shop, beginning as a reefer presser; worked 6 months at $8 per week, then at $10, and at end of first year was making $11; then made $12 until 1910, with the exception of a few months before the strike when he was in business for himself as a contractor presser, making

$18 to $20 per week; since the strike has been making $21 as jacket upper presser; attended Yiddish private school in Russia about 9 years; speaks, reads, and writes Yiddish.

PRESSER No. 8.—Born in Russia, in 1879; married; 3 children; kept a small dry-goods store in Russia; came to United States in 1906, entering this industry at once, at 27 years of age; learned the trade in the shop, beginning as under presser and piece presser; worked 2 weeks for nothing, then 2 weeks at $3, then 3 months at $5, then at $8, and by end of first year was making $10 as under presser; then worked at $12 until 1910, and since the strike has made $18 as jacket under presser; had about 7 years' schooling in Russia, part of the time in public and part in Yiddish school; speaks Russian, Polish, and Yiddish, but reads and writes "very little."

PRESSER No. 9.—Born in Russia in 1874; married; 7 children; worked in leather factory in Russia; came to United States in 1903, entering this industry at once at 29 years of age; learned the trade in the shop, beginning as skirt under presser; paid $5 for the privilege of learning and in addition worked two weeks without pay, then a few weeks at $3 and a few weeks at $6, up to $11 at end of first year; from the end of 1904 to 1910 was a presser on piecework, making about $19 average; since the strike in 1910 has been making $19 as skirt upper presser and $21 as jacket upper presser; attended Yiddish private school in Russia about 8 years; speaks and reads Yiddish, Hebrew, and Russian; writes Yiddish and Hebrew.

PRESSER No. 10.—Born in Russia in 1877; single; learned the trade as operator and presser in the Russian army, where he served for 3 years; came to United States in 1903, and notwithstanding his previous experience paid $10 for the privilege of learning, and in addition worked 4 weeks without pay in Baltimore; after that he worked for a time at $10 per week, then 2 years at $15, then at $18 until 1910; since the strike has made $21 as jacket upper presser; attended Yiddish private school in Russia about 6 years and evening school 1 year in Chicago; speaks, reads, and writes Yiddish and Polish.

PRESSER No. 11.—Born in Austrian Poland in 1862; married; 9 children, 6 of whom are married; was in business for himself in Poland; came to United States in 1905, entering this industry at once, at 43 years of age, learning the trade in the shop as a helper and piece presser; earned from $7 to $11 the first year, then worked 2 years as jacket under presser at $15.50; then was presser in the neckwear industry at $20 until 1910; after the strike returned to the cloak, suit, and skirt industry as jacket under presser at $18; had 15 years' private tutoring at home in Poland; speaks, reads, and writes Yiddish, German, Polish, Russian, Hebrew, and "a little" English.

INDIVIDUAL RECORDS OF CUTTERS.

CUTTER NO. 1.—Born in Italy in 1890; single; came to United States in 1900 and 6 years later, at 16 years of age, entered the industry, learning the trade in the shop; began as a learner, making $5 to $8 the first year; worked one year as a canvas cutter at $10, then 2 years as a cloth cutter at $14 and $16; at the time of the strike in 1910 he went into business for himself, manufacturing willow plumes; in 1912 returned to the industry as a cloth cutter at $25; attended public school in Italy about 5 years and in New York about 6 years; speaks, reads, and writes Italian and English.

CUTTER NO. 2.—Born in Germany in 1873; married; no children; came to United States in 1884 and secured work as an errand boy at $3 per week; 2 years later, at 13 years of age, entered this industry as apprentice canvas cutter, earning $12; a year later he became a trimming cutter at $15, and the next year made $18, after which he was a cloth cutter for 8 or 9 years at $24; then with a partner he kept a small hotel for a year, returning to this industry as a cloth cutter at $24 until 1910; since the strike he has been making $25 as cloth cutter; attended evening school in New York for about a year and a half, studying English and the common branches; speaks, reads, and writes English and German.

CUTTER NO. 3.—Born in New York, N. Y., in 1893; single; in 1907 went to work as an errand boy at $4 per week; in 1908 was collector for a cotton house at $7, and in 1909 shipping clerk in a cloak house at $7; in 1910, at 17 years of age, he entered this occupation as a learner at the cutting table, starting at $4 and working up to $11 in 6 months; at the time of the strike in 1910 he went to Detroit, where he secured a job as a mechanic in an automobile factory at $15; in 1911 he returned to New York, making $25 as a cloth cutter since that date; attended public school in New York for about 8 years; speaks Yiddish and English, and reads and writes English.

CUTTER NO. 4.—Born in United States in 1891; single; responsible for partial support of 3 other members of family; in 1904 went to work as a stock clerk at $6, the next year making $8; the following year was office boy and apprentice draftsman in an architect's office at $10, and then for 2 or 3 years was shipping clerk, stock clerk, and factory bookkeeper at $12; after the strike in 1910 he entered this industry, at 19 years of age, as a canvas cutter at $12; during the past 2 years has been a cloth cutter at $25; learned the trade in the shop, beginning as canvas cutter; is a graduate of the public elementary school in New York, having attended about 7 years; attended evening high school, commercial course, in New York for 1 year; speaks English, Yiddish, and German; reads and writes English and "a little" Yiddish and German.

CUTTER No. 5.—Born in Russia in 1878; married; 3 children; came to United States in 1888 and went to work as a newsboy in Troy, N. Y.; in 1895 was a pattern boy at $5 per week, and a year later canvas boy at $6; a few months later, at 17 years of age, he entered this occupation as a learner; learned the trade in the shop, working from $6 up to $10 in about 5 years; from 1901 he worked as skirt cutter for a time at $16, then as cloth cutter up to $24 in 1910; since the strike in 1910 he has been cloth cutter at $25; attended public school in Troy about 2 years; speaks Yiddish and English; reads and writes English.

CUTTER No. 6.—Born in Russia in 1891; single; principal support of family of 4; helped father in business in Russia; came to United States in 1902 and worked in leather trade 4 years; in 1906, at 15 years of age, entered this industry as canvas cutter; learned the trade in the shop, paying $25 for the privilege and in addition working 4 weeks without pay; after that received $6 per week, and in 2 years was making $14 as trimming cutter; since the strike in 1910 has been making $20 as trimming cutter; attended Yiddish private school in Russia about 6 years, and evening school in New York about 2½ years; speaks, reads, and writes Yiddish and English.

CUTTER No. 7.—Born in France in 1882; married; no children; came to United States in 1886; in 1895 began to work in a machine shop at $2.50 per week; then employed irregularly as telegraph messenger boy for 2 or 3 years at $3.50 to $9; then went to sea for a time, working as sailor and steward; in 1899, at 17 years of age, entered this industry as helper trimming and cloth cutter at $5 to $9; by 1910 he had worked up to $24 as cloth cutter, and since the strike has been making $25; attended public school in New York about 6 years, also 1 year evening school; speaks, reads, and writes English, German, and French.

CUTTER No. 8.—Born in Italy in 1874; married; 7 children; came to United States in 1877; went to work in 1886 pulling bastings at $1.25 to $2 per week; beginning in 1889 was for several years an operator on men's clothing at $3 to $9, and then jacket tailor at $10; then for 3 years a contractor in men's clothing line; in 1900, at 26 years of age, he entered this occupation, learning the trade by taking private lessons from a cutter in the latter's home; made $20 as cutter on men's clothing and $22 on cloaks and suits up to 1910; since the strike in 1910 has been making $25 as cloth cutter on cloaks and suits; attended public school in New York about 2 years, also a private Italian church school one-half year, and evening elementary school one year studying English; speaks English, Italian, Yiddish; reads and writes English and Italian.

CUTTER No. 9.—Born in Russian Poland in 1866; married; 3 children; entered this industry at 15 years of age, in 1881, by serving

an apprenticeship in London, England, beginning at 75 cents and making $7.50 at the end of 4 years; came to the United States in 1885 and secured work at once as regular cloth cutter at $18, going up to $20 in 5 years; in 1900 was making $23, and in 1905, $24; since 1910 has been making $25; attended public school in London about 6 years; speaks, reads, and writes English.

CUTTER No. 10.—Born in Austrian Poland in 1892; single; from 1905 to 1909 worked as a grocery clerk in Poland for $25 per year and board; in 1909 came to United States and entered this industry at once, at 17 years of age, learning the trade in the shop as a helper trimming cutter; began at $3 and was making $8 in 1910 as assistant trimming cutter; since the strike has been making $18 as trimming cutter; attended public school about 8 years in Poland, and evening school in New York about 4 years; speaks Yiddish, German, Russian, Polish, English; reads and writes Yiddish, German, English, and Polish.

CUTTER No. 11.—Born in Austria-Hungary, in 1889; married; no children; came to United States in 1898; in 1910, at 21 years of age, entered this industry as a helper in the shop; worked 2 months without pay, and in addition paid $50 for the privilege of learning, one-half of which went to the boss and one-half to the foreman cutter; after the strike he received $6 to $8; the next year worked as canvas cutter at $12, the following year on linings and canvas at $15, and in 1913 as cloth cutter at $20 up to $25; attended public school in Austria about 4 years, also in New York about 5 years; speaks, reads, and writes English and Yiddish.

CUTTER No. 12.—Born in Russia, in 1890; single; came to the United States in 1903, and for 3 years worked in a leather-goods factory and at several odd jobs; in 1906, at 16 years of age, began as canvas cutter; worked 6 weeks without pay in order to learn, then 6 months at $3, then for a time at $7; the next year earned from $10 up to $14, and the following year as lining cutter from $8 to $10; then as cloth and trimming cutter from $9 to $14, and in 1910, $18; since the strike has been making $25 as cloth cutter; attended public school in Russia about 5 years, also 1 year in New York, and evening school in New York 2 years; while out of work has been studying in a private preparatory school in New York in order to take the regents' examinations; speaks, reads, and writes Russian, Yiddish, German, and English.

CUTTER No. 13.—Born in Russia, in 1885; married; 1 child; came to the United States in 1906, entering the industry at once as a canvas cutter; learned the trade in the shop, supplemented by 8 months' instruction in a private designing and cutting school; worked 4 months at $5, then up to $10; in 1908 was making $12 as cloth cutter, $15 in 1909, and $22 in 1910; since the strike in 1910 has been making

$25; attended public school in Russia about 10 years, and evening school in New York about 5 years; speaks, reads, and writes Russian, Yiddish, and English.

AGE, COUNTRY OF BIRTH, AND CONJUGAL CONDITION.

AGE.—Table F, which follows, shows that the median age for 100 pressers studied falls in the group 35 to 39 years, while that for cutters falls between 29 and 30, which means an age difference of 7 or 8 years. The mode (the group containing the largest number) for pressers is the 35 to 39 group, while that for the cutters is the 25 to 29 group. One-fifth of the pressers are 45 years old or over, as against one-tenth of the cutters. Only one-twelfth of the pressers are under 25 years of age, as against one-fourth of the cutters. About one-fourth of the pressers (28) are under 30 years of age, compared with one-half of the cutters (50). The accompanying chart (No. 18) indicates graphically the preponderance of cutters in the lower age groups and of pressers in the higher.

COUNTRY OF BIRTH.—Table F shows that 21 cutters were born in the United States, whereas all of the pressers were foreign born. Russia is the country of birth for the largest group in each occupation—70 pressers and 46 cutters (58.2 per cent of the 79 foreign-born cutters).

The median age for pressers born in Russia is 35 to 39, practically determining the median for the entire 100. The median age for cutters born in Russia, however, is 25 to 29, 10 years younger than for pressers and lower than the median for the 100 cutters, while the median age for 21 American-born cutters is 30 to 34, higher than that for the entire 100. Chart 19 shows the distribution.

TABLE F.—AGE AND COUNTRY OF BIRTH.

Country of birth.	Number in each classified age group.									Total.
	Under 18 years.	18 to 20 years.	21 to 24 years.	25 to 29 years.	30 to 34 years.	35 to 39 years.	40 to 44 years.	45 to 49 years.	50 years and over.	
PRESSERS.										
Russia			7	17	7	18	7	9	5	70
Russian Poland					1	2	1		1	5
Austria-Hungary					1	2	1		1	5
Austrian Poland			1	3	6	5		2	2	19
Roumania									1	1
Total			8	20	15	27	9	11	10	100
CUTTERS.										
Russia		1	12	13	8	7	3	1	1	46
Russian Poland								1		1
Austria-Hungary		1	3	1	2	1	1	1	1	11
Austrian Poland			3	4	3		1	1		12
Roumania				1						1
Germany							2		2	4
France					1					1
Italy			1			1				2
United States		2	2	6	3	2	4		2	21
England						1				1
Total		4	21	25	17	12	11	4	6	100

CHART 18.—DISTRIBUTION OF 100 PRESSERS AND 100 CUTTERS, BY AGE GROUPS.

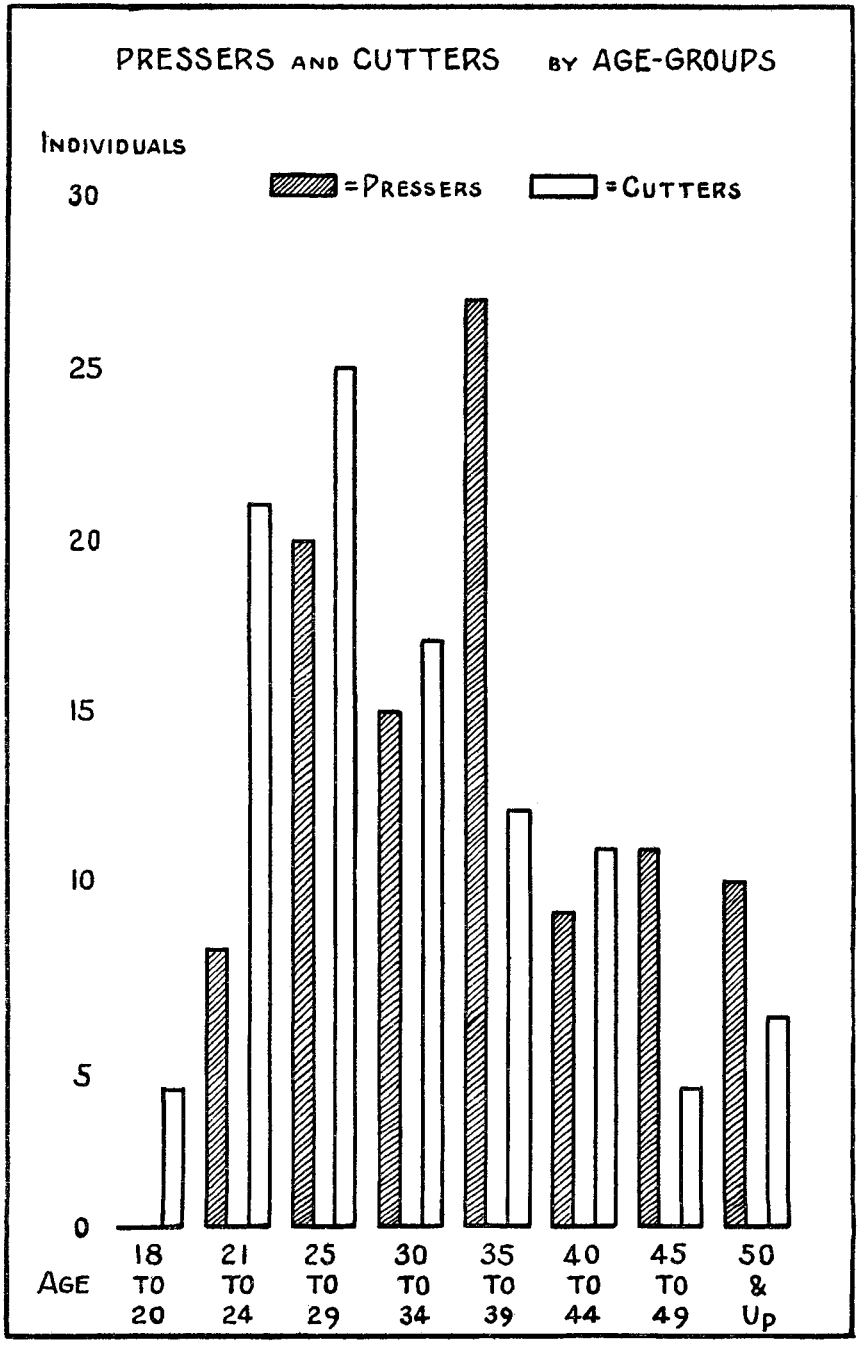


CHART 19.—COUNTRY OF BIRTH OF 100 PRESSERS AND 100 CUTTERS.

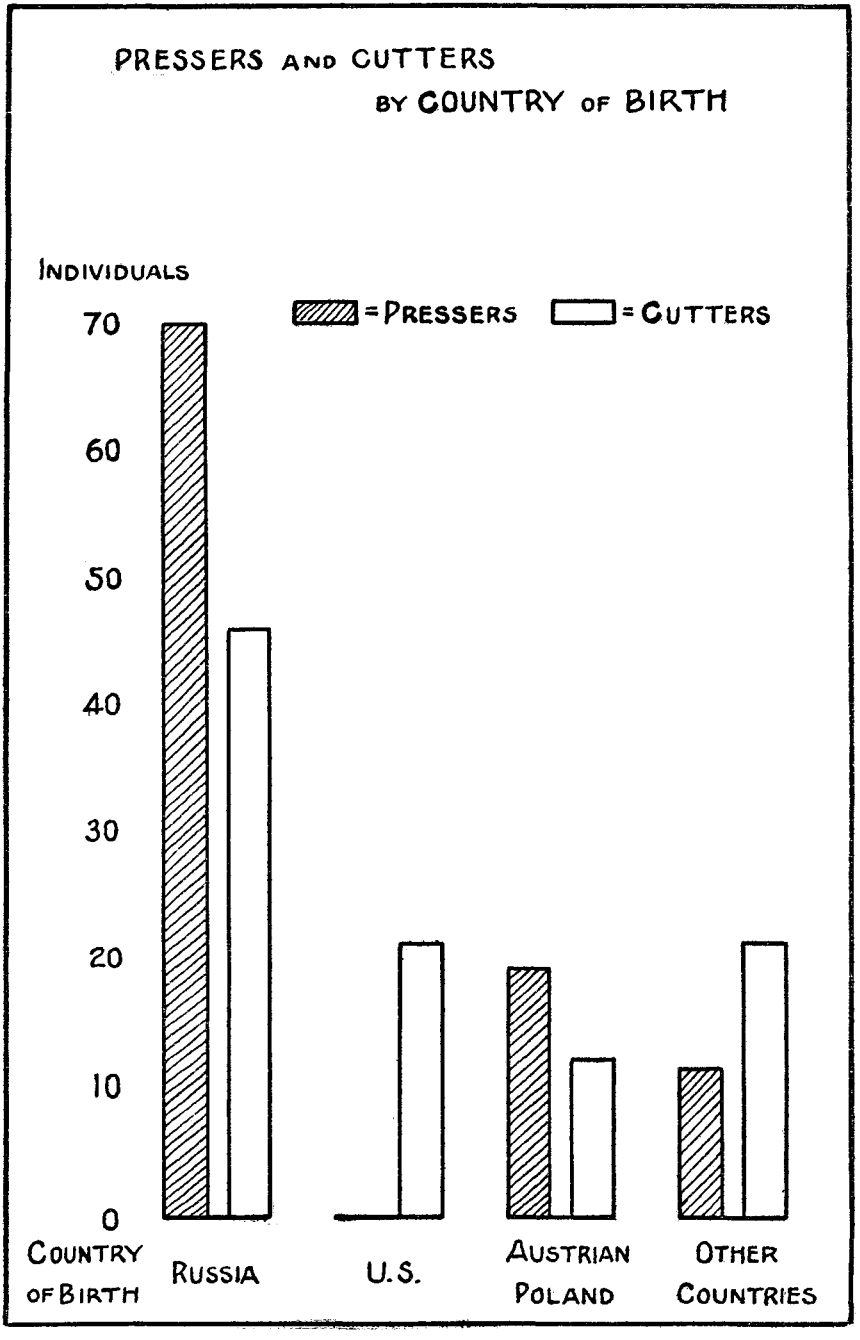


TABLE G.—CONJUGAL CONDITION AND NUMBER OF CHILDREN, BY AGE GROUPS.

Age group (years).	Total.	Number single.	Number married.	Number having—										Median number of children.	Average number of children.
				No children.	1 child.	2 children.	3 children.	4 children.	5 children.	6 children.	7 children.	8 children.	9 children.		
PRESSERS.															
Under 18															
18 to 20															
21 to 24	8	4	4	3	1										0.3
25 to 29	20	2	18	2	4	4	5	3						2	2.2
30 to 34	15	1	14	2	2	3	4	3						2	2.3
35 to 39	27	1	26	1	1	5	10	5	3		1			3	3.2
40 to 44	9		9		1		3	1		2	2			4	4.4
45 to 49	11		11					2	2	3	3	1		6	5.9
50 and over	10		10			1	1	3	2		1	1	1	4	5.1
Total	100	8	92	8	9	13	23	17	7	5	7	2	1	3	3.4
CUTTERS.															
Under 18															
18 to 20	4	4													
21 to 24	21	15	6	3	1	2									.8
25 to 29	25	10	15	6	7	2								1	.7
30 to 34	17		17	5	7	3		1	1					1	1.3
35 to 39	12	2	10	2	1	3	2			1	1			2	2.6
40 to 44	11	2	9	2	2	3	2							2	1.6
45 to 49	4		4			1	1	1				1		3	4.3
50 and over	6	1	5			1	2		1		1			3	4.0
Total	100	34	66	18	18	15	7	2	2	1	2	1		1	1.7

CONJUGAL CONDITION.—Table G shows that 92 per cent of the pressers are married, as against 66 per cent of the cutters; 8 of the pressers who are married (8.7 per cent) have no children, as against 18 cutters (27.3 per cent of the married). The average number of children in the families of the pressers who are married is 3.4, with the median at 3; for cutters the average is 1.7 and the median 1. At each age group also the median number of children per family is consistently larger for pressers than for cutters.

Twenty-two of the 28 pressers under 30 years of age are married (78.6 per cent) and average nearly 2 children per family (1.82), while only 21 of the 50 cutters under 30 years of age are married (42 per cent), with an average of less than 1 child per family (0.76).

All of the 30 pressers who are 40 years of age or over are married, and the average number of children is 5.2; 18 of the 21 cutters (85.7 per cent) of the corresponding group are married, and the average number of children is 2.8; the median number of children is 5 for pressers and 2+ for cutters.

From Table H it appears that while Russia furnishes 70 per cent of the pressers, and 69.6 per cent of those married, only 46 per cent of the cutters are Russian born, and 48.5 per cent of the married. Of the 70 Russian-born pressers 64 are married, 91.4 per cent, while of the 46 Russian-born cutters only 32 are married, 69.6 per cent, a condition which can be accounted for perhaps by the 10 years' difference

in age groups, as shown in Table F. Of the 21 American-born cutters, however, with a median age slightly higher than that of the entire group, only 12 are married—57.1 per cent, as against 66 per cent for the 100.

The average number of children in the families of the 64 Russian-born pressers is 3.4, and of 18 born in Austrian Poland, 3.1; the averages for the corresponding groups of cutters are 1.6 and 1.6, respectively. The average number of children for 8 cutters born in Austria-Hungary, and 12 born in the United States, are 2.3 and 1.8, respectively. The differences again can be accounted for partly by the differences in age. Of the natives of Austrian Poland the median age for pressers, as shown in Table F, is 30 to 34, and for cutters, 25 to 29; of the natives of Austria-Hungary the median age for pressers is 35 to 39, and for cutters, 30 to 34. It is quite possible that other factors are involved, such as standards of living, but these age differences must be regarded as significant.

When the comparison is made between pressers and cutters of the same age groups, however, not only is marriage more common among the pressers, but the number of children per family is progressively greater. This is clearly seen in the charts.

TABLE H.—CONJUGAL CONDITION AND NUMBER OF CHILDREN, BY COUNTRY OF BIRTH.

Country of birth.	Total.	Number single.	Number married.	Number having—									
				No children.	1 child.	2 children.	3 children.	4 children.	5 children.	6 children.	7 children.	8 children.	9 children.
PRESSERS.													
Russia	70	6	64	6	6	9	16	10	6	3	6	2	.....
Russian Poland	5	1	4	.....	.....	.....	2	1	.....	.....	1	.....	.....
Austria-Hungary	5	.....	5	.....	.....	2	2	.....	.....	1	.....	.....	.....
Austrian Poland	19	1	18	2	3	2	3	5	1	1	.....	.....	1
Roumania	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Total	100	8	92	8	9	13	23	17	7	5	7	2	1
CUTTERS.													
Russia	46	14	32	9	9	8	4	.....	.....	1	.....	1	.....
Russian Poland	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Austria-Hungary	11	3	8	3	.....	2	1	1	.....	.....	1	.....	.....
Austrian Poland	12	4	8	1	4	2	.....	.....	1	.....	.....	.....	.....
Roumania	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Germany	4	2	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....
France	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Italy	2	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
United States	21	9	12	2	5	2	1	1	1	.....	.....	.....	.....
England	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100	34	66	18	18	15	7	2	2	1	2	1	.....

AGE AT ENTERING THE INDUSTRY AND NUMBER OF YEARS IN THE INDUSTRY.

AGE AT ENTRANCE.—We may now compare the pressers and cutters with reference to the ages at which they entered the industry, and for this purpose present Tables I and J.

TABLE I.—AGE AT ENTERING THE INDUSTRY, BY COUNTRY OF BIRTH.

Country of birth.	Number entering industry at age—								Total.
	Under 18	18 to 20	21 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	
PRESSERS.									
Russia	3	11	14	18	10	6	7	1	70
Russian Poland	.....	.....	.....	2	1	1	.....	1	5
Austria-Hungary	.....	1	.....	2	1	1	.....	.....	5
Austrian Poland	.....	3	4	7	2	1	2	.....	19
Roumania	.....	.....	.....	.....	.....	.....	1	.....	1
Total	3	15	18	29	14	9	10	2	100
CUTTERS.									
Russia	14	18	5	6	1	1	.....	1	46
Russian Poland	1	.....	.....	.....	.....	.....	.....	.....	1
Austria-Hungary	5	.....	2	3	1	.....	.....	.....	11
Austrian Poland	3	4	4	.....	1	.....	.....	.....	12
Roumania	.....	1	.....	.....	.....	.....	.....	.....	1
Germany	1	1	1	1	.....	.....	.....	.....	4
France	1	.....	.....	.....	.....	.....	.....	.....	1
Italy	1	.....	.....	1	.....	.....	.....	.....	2
United States	12	6	2	.....	1	.....	.....	.....	21
England	.....	.....	.....	1	.....	.....	.....	.....	1
Total	38	30	14	12	4	1	.....	1	100

TABLE J.—AGE AT ENTERING THE INDUSTRY, BY AGE GROUPS.

Age group (years).	Number entering industry at age—								Total.
	Under 18	18 to 20	21 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	
PRESSERS.									
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	3	4	1	.....	.....	.....	.....	.....	8
25 to 29	.....	8	10	2	.....	.....	.....	.....	20
30 to 34	.....	1	3	10	1	.....	.....	.....	15
35 to 39	.....	.....	3	15	8	1	.....	.....	27
40 to 44	.....	2	1	1	1	4	.....	.....	9
45 to 49	.....	.....	.....	1	2	2	5	1	11
50 and over	.....	.....	.....	.....	2	2	5	1	10
Total	3	15	18	29	14	9	10	2	100
CUTTERS.									
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	4	.....	.....	.....	.....	.....	.....	.....	4
21 to 24	13	7	1	.....	.....	.....	.....	.....	21
25 to 29	9	11	5	.....	.....	.....	.....	.....	25
30 to 34	5	6	4	2	.....	.....	.....	.....	17
35 to 39	4	3	.....	5	.....	.....	.....	.....	12
40 to 44	2	1	2	3	2	1	.....	.....	11
45 to 49	1	.....	.....	1	2	.....	.....	.....	4
50 and over	.....	2	2	1	.....	.....	.....	1	6
Total	38	30	14	12	4	1	.....	1	100

The median age at entrance for pressers lies in the 25 to 29 group, and that for cutters at 18 to 20. Of the pressers, 18 entered the industry under 21 years of age, as against 68 cutters; and of those who entered after 30 years of age there are 35 pressers and 6 cutters.

Of 70 Russian-born pressers, 20 per cent (14) entered the industry under 21 years of age, as compared with 69.6 per cent (32) of the Russian-born cutters. Of the pressers, only 3 of the 19 Austrian Poles entered the industry under 21 years of age, as compared with 7 out of 12 cutters of the same nativity.

In view of the fact already noted that the median age of the American-born cutters is slightly higher than the median for the 100, it is interesting to note that the percentage entering the industry under 21 years of age, 85.7 (18 out of 21), is higher than for any other nationality group having more than one representative. The fact that more than one-third of the cutters (38) entered the industry under 18 years of age is perhaps as significant as any other single item in the table in suggesting a radical difference between the two occupations. The accompanying chart (No. 20) represents the numbers of individuals entering the industry at ages given, and illustrates the dissimilarity of the two distributions.

Table J makes it possible to compare ages at entrance for different age groups. Of 72 pressers who are 30 years of age or over, only 3, or 4.2 per cent, entered the industry under 21 years of age; the corresponding figures for cutters are 24 out of 50, or 48 per cent. Studying each age group separately it will be observed that the cutters uniformly enter the industry at earlier ages than the pressers.

YEARS IN THE INDUSTRY.—Obviously if cutters at all age groups entered the industry younger than pressers, the former have been in the industry for longer periods. These facts are shown in detail in Tables K and L, from which it appears that the median number of years in the industry is 7 for pressers, and 9 for cutters. The mode for pressers falls at 7 years, and that for cutters even lower, at 6 years.

Comparing Russian-born cutters and pressers the median number of years in the industry is found to be the same. The only other considerable group of pressers, Austrian Poles, has the same median. The higher median for cutters is brought up principally by the number of American born who entered at very early ages.

From Table L it appears that of 72 pressers who are 30 years of age or over, 24, or 33.3 per cent, have been in the industry less than 7 years, as compared with 3 out of 50 cutters, or 6 per cent. On the other hand, of 30 pressers who are 40 years of age or over, 11, or 36.7 per cent, have been in the industry 15 years or over, as compared with 15 out of 21 cutters, or 71.4 per cent.

CHART 20.—AGE AT ENTERING THE INDUSTRY OF 100 PRESSERS AND 100 CUTTERS.

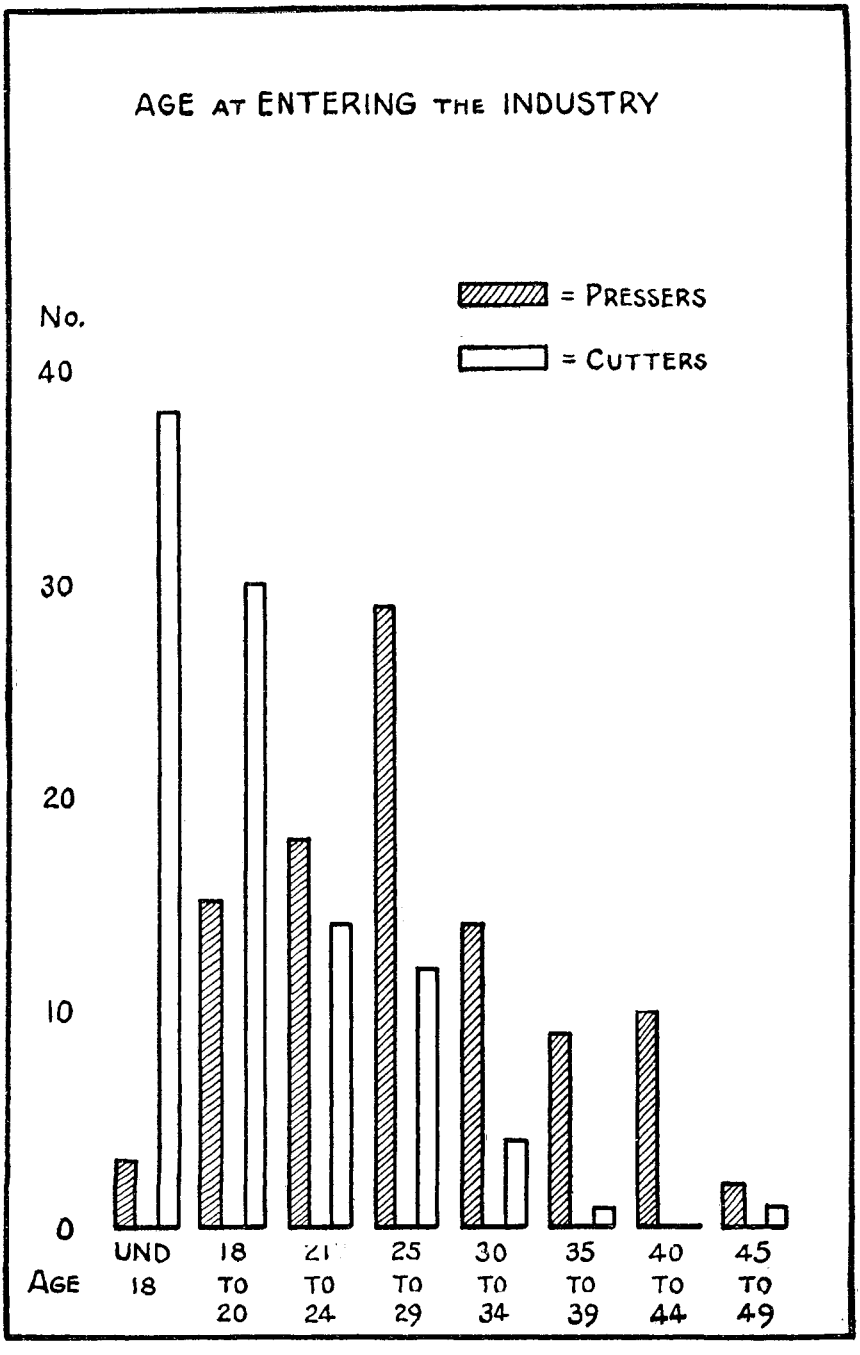


TABLE K.—NUMBER OF YEARS IN THE INDUSTRY, BY COUNTRY OF BIRTH.

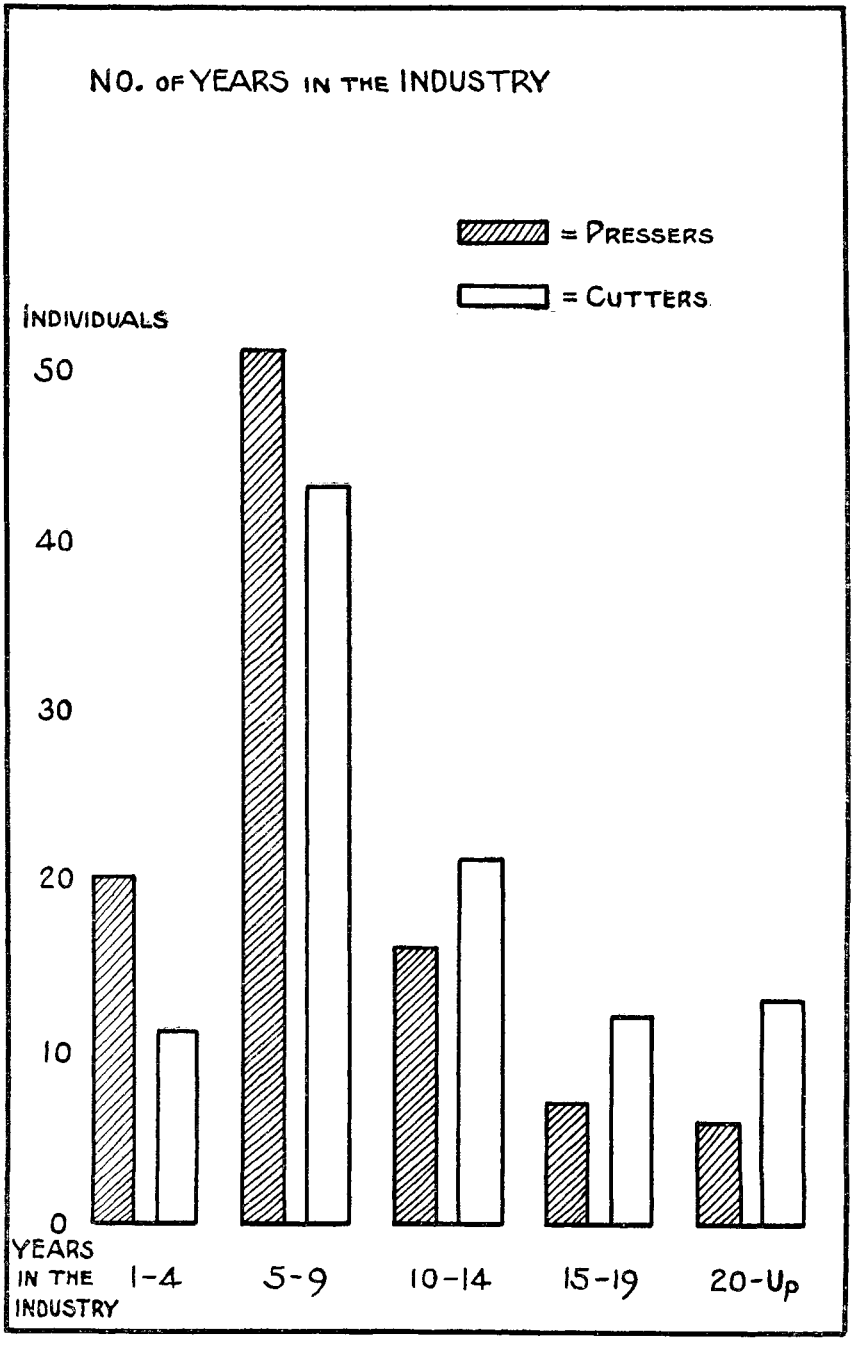
Country of birth.	Total.	Employees reporting each specified number of years in the industry.														Median number of years.
		1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over.	
PRESSERS.																
Russia	70	1	1	5	6	6	9	14	5	5	8	6	4	.....	.....	7
Russian Poland	5	.....	.....	3	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
Austria-Hungary	5	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....
Austrian Poland	19	.....	.....	.....	2	2	4	2	2	1	5	1	.....	.....	.....	7
Roumania	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Total	100	1	1	10	8	8	13	16	7	7	16	7	5	1	.....	7
CUTTERS.																
Russia	46	.....	.....	3	2	4	10	5	3	4	7	6	2	.....	.....	7
Russian Poland	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Austria-Hungary	11	.....	.....	1	1	1	.....	1	1	1	1	2	1	.....	1	9
Austrian Poland	12	.....	.....	.....	1	.....	1	2	2	1	4	1	.....	.....	.....	8
Roumania	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Germany	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	2	.....
France	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Italy	2	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....
United States	21	.....	.....	2	1	.....	1	.....	1	3	5	3	2	1	2	12
England	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Total	100	.....	.....	6	5	6	12	9	7	9	21	12	5	2	6	9

TABLE L.—NUMBER OF YEARS IN THE INDUSTRY, BY AGE GROUPS.

Age group (years).	Total.	Employees reporting each specified number of years in the industry.														Median number of years.
		1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over.	
PRESSERS.																
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	8	.....	.....	1	1	.....	3	3	.....	.....	.....	.....	.....	.....	.....	6
25 to 29	20	1	.....	.....	4	3	4	4	3	.....	1	.....	.....	.....	.....	6
30 to 34	15	.....	.....	4	.....	1	3	2	1	2	2	.....	.....	.....	.....	6
35 to 39	27	.....	1	4	1	.....	3	4	1	2	9	2	.....	.....	.....	7
40 to 44	9	.....	.....	1	1	.....	.....	2	.....	.....	1	1	3	.....	.....	14
45 to 49	11	.....	.....	.....	1	4	.....	1	.....	2	.....	3	.....	.....	.....	7
50 and over	10	.....	.....	.....	.....	.....	.....	.....	2	1	3	1	2	1	.....	11
Total	100	1	1	10	8	8	13	16	7	7	16	7	5	1	.....	7
CUTTERS.																
18 to 20	4	.....	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
21 to 24	21	.....	.....	4	3	1	5	3	2	2	1	.....	.....	.....	.....	6
25 to 29	25	.....	.....	.....	1	3	5	5	4	4	3	.....	.....	.....	.....	7
30 to 34	17	.....	.....	.....	.....	1	.....	1	1	2	9	3	.....	.....	.....	11
35 to 39	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	4	3	.....	.....	16
40 to 44	11	.....	.....	.....	.....	.....	1	.....	.....	1	2	4	1	2	.....	15
45 to 49	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	1	18
50 and over	6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	5	30
Total	100	.....	.....	6	5	6	12	9	7	9	21	12	5	2	6	9

The following chart (No. 21) indicates graphically the preponderance of pressers who have been in the industry less than 10 years, and of cutters who have been in 10 years or over.

CHART 21.—NUMBER OF YEARS IN THE INDUSTRY FOR 100 PRESSERS AND 100 CUTTERS.



YEARS IN THE UNITED STATES OF FOREIGN BORN AND YEARS IN THE UNITED STATES BEFORE ENTERING THE INDUSTRY.

YEARS IN UNITED STATES.—It may be pertinent now to compare pressers and cutters with respect to the number of years since coming to the United States, eliminating, of course, the American-born. Table M shows the facts. For pressers the median and mode both fall at 7 years; for cutters the median is 11 years, while the mode is 8 years. With the exception of the single age group, 25 to 29, the median number of years in the United States is consistently greater at all ages for cutters than for pressers.

Of 57 pressers who are 35 years of age or over, 29, or 50.9 per cent, have been in the United States less than 10 years; the corresponding figures for cutters are 2 out of 25, or 8 per cent. On the other hand, of 30 pressers who are 40 years of age or over, 11, or 36.7 per cent, have been in the United States more than 15 years, as against 10 out of 15 cutters—66.7 per cent.

TABLE M.—NUMBER OF YEARS IN THE UNITED STATES OF FOREIGN BORN, BY AGE GROUPS.

Age group (years).	Total foreign born.	Foreign born reporting each specified number of years residence in the United States.														Median number of years.
		1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over.	
PRESSERS.																
Under 18																
18 to 20																
21 to 24	8			1	1		3	3								6
25 to 29	20				2	2	4	7	3	2						7
30 to 34	15			3		1	3	2	2	3	1					7
35 to 39	27		1	3	2		2	3	2	2	10	2				9
40 to 44	9			1	1			2			1	2	2			14
45 to 49	11				1	1		3		2	1	2	1			9
50 and over	10								1	2	3		2	1	1	11
Total	100		1	8	7	4	12	20	8	11	16	6	5	1	1	7
CUTTERS.																
Under 18																
18 to 20	2					1					1					
21 to 24	19			1	2		1	1	4		6	4				10
25 to 29	19					2	4	5	3	1	3	1				7
30 to 34	14							2	1	1	5	2	1	1	1	11
35 to 39	10										2	1	3	2	2	+20
40 to 44	7								1	1		2	1	1	1	+16
45 to 49	4										1	1	1	1		17
50 and over	4										1				3	+30
Total	79			1	2	3	5	8	9	3	19	11	6	5	7	11

YEARS IN UNITED STATES BEFORE ENTERING INDUSTRY.—A very marked difference between the two occupations is found upon examination of the comparative readiness with which the newly arrived immigrant finds his way into them. Table N shows the number of years of interval after coming to the United States before entering

the industry. Deducting those who had already entered the industry before coming here, and those born here, it appears that 84 out of 96 pressers, 87.5 per cent, were absorbed into the industry within a year after arrival, as against 36 out of 78 cutters, 46.2 per cent. Only 7.3 per cent of the pressers failed to get into the industry within 2 years after coming to the United States, while 37.2 per cent (29) of the cutters required more than 2 years, and 26.9 per cent (21) required 6 years or more.

Taking the Russian-born groups by themselves, an even greater disparity between pressers and cutters is observed. Chart 22 shows the distribution reduced to percentages of the total foreign-born pressers and cutters, respectively, and the distribution for the Russian born, reduced to percentages of the Russian born.

The facts here brought out are of interest particularly in conjunction with the previously emphasized facts that the cutters are 7 to 8 years younger than the pressers (comparing the median ages), and in general enter the industry about 2 years earlier.

TABLE N.—LENGTH OF TIME IN THE UNITED STATES BEFORE ENTERING THE INDUSTRY, BY COUNTRY OF BIRTH.

Country of birth.	Total foreign born.	Foreign born residing in the United States before entering the industry—						
		Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years and over.
PRESSERS.								
Russia	67	58	4	3	.....	.....	.....	2
Russian Poland	5	5	.....	.....	.....	.....	.....	.....
Austria-Hungary	5	3	1	.....	.....	.....	.....	1
Austrian Poland	18	17	.....	.....	.....	.....	.....	1
Roumania	1	1	.....	.....	.....	.....	.....	.....
Total	[1] 96	[1] 84	5	3	.....	.....	.....	4
CUTTERS.								
Russia	46	22	2	6	3	2	1	10
Austria-Hungary	11	3	.....	2	.....	1	1	4
Austrian Poland	12	9	2	.....	.....	.....	.....	1
Roumania	1	1	.....	.....	.....	.....	.....	.....
Germany	4	1	.....	1	.....	.....	.....	2
France	1	.....	.....	.....	.....	.....	.....	1
Italy	2	.....	.....	.....	.....	.....	.....	2
England	1	.....	.....	.....	.....	.....	.....	1
Total	[2] 78	[2] 36	4	9	3	3	2	21

[1] Not including 4 who entered the industry before coming to the United States, 1 born in Austrian Poland and 3 in Russia. All went to work in the industry within 1 year after arrival.
[2] Not including 1 born in Russian Poland, who entered the industry before coming to the United States. He went to work in the industry within 1 year after arrival.

From Table O it appears that of 40 foreign-born cutters under 30 years of age, 18 entered the industry within a year after arrival, and the same is true of 18 out of 38 who are 30 years of age or over, indicating no significant difference between the younger and the older groups. The corresponding quantities in the table for pressers are too small to give any indication of a tendency.

CHART 22.—PER CENT OF FOREIGN-BORN AND OF RUSSIAN-BORN PRESSERS AND CUTTERS, BY CLASSIFIED NUMBER OF YEARS IN THE UNITED STATES BEFORE ENTERING THE INDUSTRY.

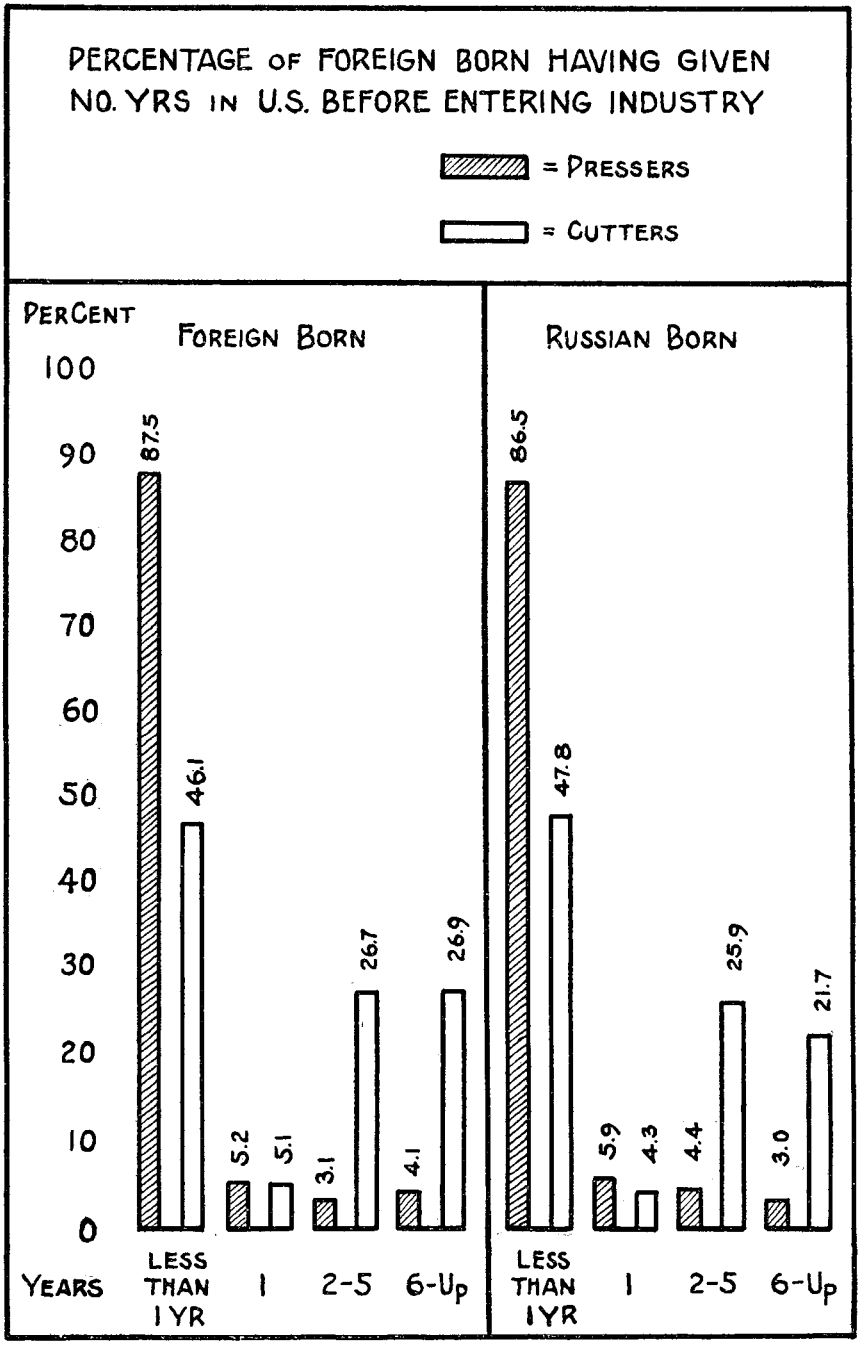


TABLE O.—LENGTH OF TIME IN THE UNITED STATES BEFORE ENTERING THE INDUSTRY, BY AGE GROUPS.

Age group (years).	Total foreign born.	Foreign born residing in the United States before entering the industry—						
		Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years and over.
PRESSERS.								
Under 18								
18 to 20								
21 to 24	8	8						
25 to 29	19	16	2					1
30 to 34	14	13						1
35 to 39	26	22	2	2				
40 to 44	8	8						
45 to 49	11	9		1				1
50 and over	10	8	1					1
Total	[1] 96	[1] 84	5	3				4
CUTTERS.								
Under 18								
18 to 20	2			1				1
21 to 24	19	6	1	2	1	2		7
25 to 29	19	12	2	1	2		1	1
30 to 34	14	9		2				3
35 to 39	10	3		1				6
40 to 44	7	2	1	2				2
45 to 49	3	3						
50 and over	4	1				1	1	1
Total	[2] 78	[2] 36	4	9	3	3	2	21

[1] Not including 4 who entered the industry before coming to the United States, 1 each in age groups 25 to 29, 30 to 34, 35 to 39, and 40 to 44. All went to work in the industry within 1 year after arrival.
[2] Not including 1 in age group 45 to 49, who entered the industry before coming to the United States. He went to work in the industry within 1 year after arrival.

PREVIOUS OCCUPATION AND METHOD OF LEARNING THE TRADE.

PREVIOUS OCCUPATION.—Since so large a proportion of both pressers and cutters entered the industry as adults after coming to the United States, the next important question to be studied relates to the previous occupations. This part of the inquiry was limited to occupations in Europe, for interest centers in the effort to determine what influence, if any, such occupations have upon the conditions of entrance into this industry. Whatever other occupations were engaged in after arrival in this country in most cases seem to have been regarded as merely temporary in nature.

The first fact that arrests the attention in Table P is that only five pressers and five cutters learned the trade in which they are now employed before coming to the United States.

Among the pressers, by far the largest group, 48, is made up of those reporting themselves as having been salesmen, or in business for themselves. Inquiry into details elicited the information that in Russia to be a "business man" does not involve anything like the investment of capital or completeness of establishment that are implied by the typical American when he uses that expression. It was found in some cases, for example, that the "business" consisted of a push-cart, or a peddler's outfit, or other equally modest undertaking. This fact should be kept in mind, therefore, in studying the table.

One is not prepared to find the larger number of the skilled mechanics drawn into this industry as pressers rather than cutters. The fact

that cutting ranks higher as a skilled trade than pressing would lead one to expect that the former would attract most of the skilled workers that might be found among a miscellaneous aggregation of candidates for entrance into the industry. The explanation for this seeming anomaly, however, as well as for the comparatively large number of cutters with no previous occupation reported, is probably the large number of cutters belonging to the younger age groups—too young to have engaged in any occupation before coming to this country, and certainly too young to have acquired a skilled trade.

The occupations specified and listed in connection with Table P are interesting as indicating the great variety of sources from which the cutters, and especially the pressers, have come. The following chart (No. 23) based on this table, shows the distribution in summarized form.

This table indicates the small proportion of those who learned their present trades in any other way than "on the job," seven among the cutters and none at all among the pressers. The industry seems to have made a kind of provision for such training as is absolutely necessary, but the provision, such as it was, apparently offered less resistance to the presser than to the cutter.

TABLE P.—PREVIOUS OCCUPATION IN EUROPE, AND METHOD OF LEARNING TRADE IN UNITED STATES.

Country of birth.	Total.	Previous occupation in Europe.							Learned trade in shop after coming to United States.
		Present occupation.	Profession.	Skilled trade.	Salesman or in business.	Miscellaneous occupations.	Farm or forestry.	No occupation reported.	
PRESSERS.									
Russia	70	4	4	20	28	7	2	5	66
Russian Poland	5			1	2	1		1	5
Austria-Hungary	5				4		1		5
Austrian Poland	19	1		2	13	3			18
Roumania	1				1				1
Total	100	5	[1] 4	[2] 23	48	[3] 11	3	6	[4] 95
CUTTERS.									
Russia	46	2	6	3	17	2		16	43
Russian Poland	1	1							
Austria-Hungary	11	2			3			6	9
Austrian Poland	12			1	5		3	3	12
Roumania	1				1				1
Germany	4				1			3	3
France	1							1	1
Italy	2							2	1
United States	21								17
England	1				1				1
Total	100	5	[5] 6	[6] 4	28	[7] 2	3	31	[8] 88

[1] Includes teachers, 2; students, 2.
[2] Includes carpenters, 5; bakers, 2; shoemakers, 2; tobacco cutter, 1; millers, 2; locksmiths, 3; butchers, 3; brass polisher, 1; ironworker, 1; brush maker, 1; wood turner, 1; boot and shoe laster, 1.
[3] Includes soap maker, 1; worker in leather factory, 2; conductor, 1; agent at railroad station, 1; drivers, 2; worker in brewery, 1; bookkeeper, 1; railroad porter and clerk, 1; common laborer, 1.
[4] Five others learned the trade before coming to the United States.
[5] Students.
[6] Includes plasterer, 1; baker, 1; bookbinder, 1; tinsmith, 1.
[7] Includes worker in match factory, 1; worker in saloon, 1.
[8] In addition to these, 7 others learned their trade in the United States, 5 by apprenticeship and 1 each by private instruction and from member of his family; 5 others learned their trade before coming to the United States.

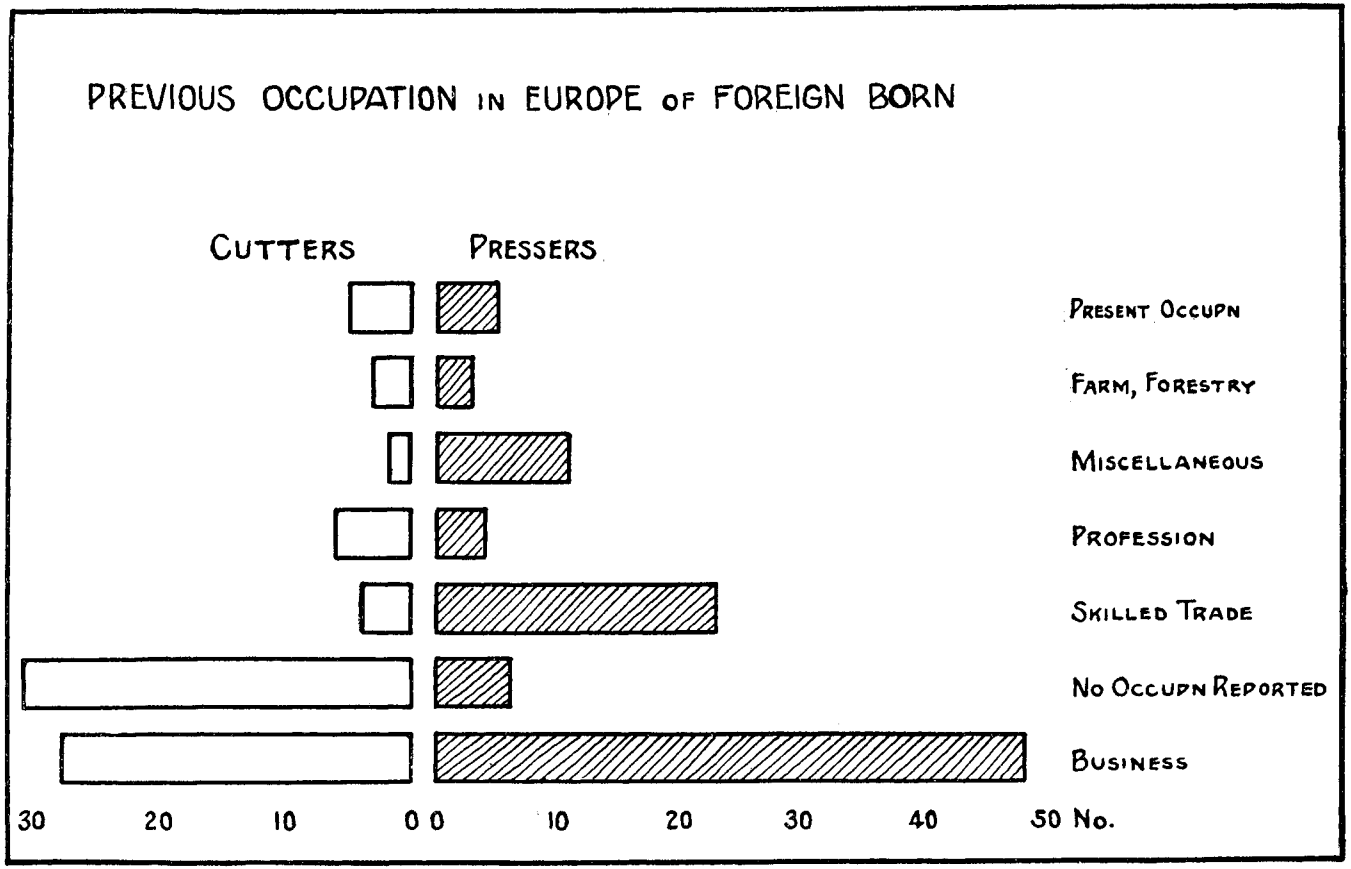


CHART 23.—PREVIOUS OCCUPATION IN EUROPE OF 100 FOREIGN-BORN PRESSERS AND 79 FOREIGN-BORN CUTTERS.

SCHOOL ATTENDANCE.

Each individual was asked to state how many years he had gone to school, where the school was located, and the character of the school. The information thus given is classified and presented in Tables Q and R, but not with the idea that detailed comparisons are of great significance or profit. It has not been possible to attempt to evaluate in any way a year of training in the public elementary schools of New York in terms of training in the schools in Russia, Poland, and elsewhere, attended by these subjects. Much less is there available any definite measure of the comparative value of the work of the so-called public schools in Russia, in which the pupils pay tuition, and the Yiddish parochial or private schools, and other types which have been mentioned in the schedules. Further, before giving great weight to the findings of such an inquiry as this it would be desirable to classify the communities supporting the schools, roughly at least, as to their probable educational standards. If no more could be done than to classify the schools as rural, village, and urban, in accordance with some predetermined population scale, their products might be somewhat more comparable than is the case in the present study.

Nevertheless it is believed that certain rough comparisons may be made on the basis of the data as collected. In order to separate incommensurable elements so far as possible, the tables are divided into three sections, each section exclusive of the others—attendance at: (1) Day school in Europe, (2) day school in the United States, and (3) evening school in the United States.

Concerning day-school attendance in Europe, Table Q shows that all but 2 of the pressers, 98 per cent, went to school at least one year; of 79 foreign-born cutters, 64, or 81 per cent, went to school in Europe.

The number of those attending day school in the United States is 2 for pressers and 40 for cutters. The report of evening-school attendance is 21 pressers and 47 cutters; 5 pressers report two or more years of evening-school attendance, as compared with 34 cutters.

A rough composite of the three sections of the table as shown in Chart 24, which follows Table Q, seems to indicate a somewhat better showing for cutters than for pressers, so far as amount of schooling is concerned.

TABLE Q.—SCHOOL ATTENDANCE, BY COUNTRY OF BIRTH.

[A fraction of a year equal to one-half or over is recorded as one year. Private lessons are arbitrarily recorded as equivalent to one-half the same length of time in regular day schools.]

Country of birth.	Total.	Number reporting no schooling.	Number reporting given number of years of day schooling.								Number reporting given number of years of evening schooling in United States.				
			In Europe.				In United States.								
			0 yrs.	1 to 4 yrs.	5 to 9 yrs.	10 yrs. and over.	0 yrs.	1 to 4 yrs.	5 to 9 yrs.	10 yrs. and over.	0 yrs.	1 yr.	2 yrs.	3 yrs.	4 yrs. and over.
PRESSERS.															
Russia	70	2	.....	5	49	14	66	2	.....	.....	53	13	1	.....	1
Russian Poland	5	.....	.....	1	4	.....	5	.....	.....	.....	4	1	.....	.....	.....
Austria-Hungary	5	.....	.....	.....	3	2	5	.....	.....	.....	4	.....	1	.....	.....
Austrian Poland	19	.....	.....	2	10	7	19	.....	.....	.....	15	2	2	.....	.....
Roumania	1	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....
Total	100	2	.....	8	67	23	96	2	.....	.....	77	16	4	.....	1
CUTTERS.															
Russia	46	1	8	8	22	7	33	7	5	.....	17	8	12	5	3
Russian Poland	1	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....
Austria-Hungary	11	.....	2	1	8	.....	8	.....	2	1	8	.....	3	.....	.....
Austrian Poland	12	.....	1	1	7	3	11	.....	1	.....	5	2	3	1	1
Roumania	1	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....
Germany	4	.....	1	.....	3	.....	4	.....	.....	.....	2	.....	2	.....	.....
France	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....
Italy	2	.....	1	.....	1	.....	.....	1	1	.....	1	1	.....	.....	.....
United States	21	.....	21	.....	.....	.....	.....	1	17	3	16	1	4	.....	.....
England	1	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....
Total	100	1	35	10	44	10	59	9	27	4	52	13	24	6	4

A comparison of age groups, Table R, discloses the following facts: Of 28 pressers under 30 years of age, 23, or 82.1 per cent, have had at least 5 years of schooling in Europe, as against 26 out of 50 cutters, 52 per cent. Of the same groups, no pressers have had 5 years of schooling in the United States, as against 16 cutters, or 32 per cent; 10 pressers under 30 years of age have had one year or more of evening school, 35.7 per cent, as against 26 cutters, 52 per cent. Of those 30 years of age or over, 67 out of 72 pressers, or 93.1 per cent, have had at least 5 years of schooling in Europe, as against 28 out of 50 cutters, 56 per cent. Of the same groups, no presser has had any day schooling in the United States, as against 18 cutters, 36 per cent; 11 pressers, or 15.3 per cent, have had one year or more of evening school, as against 21 cutters, 42 per cent.

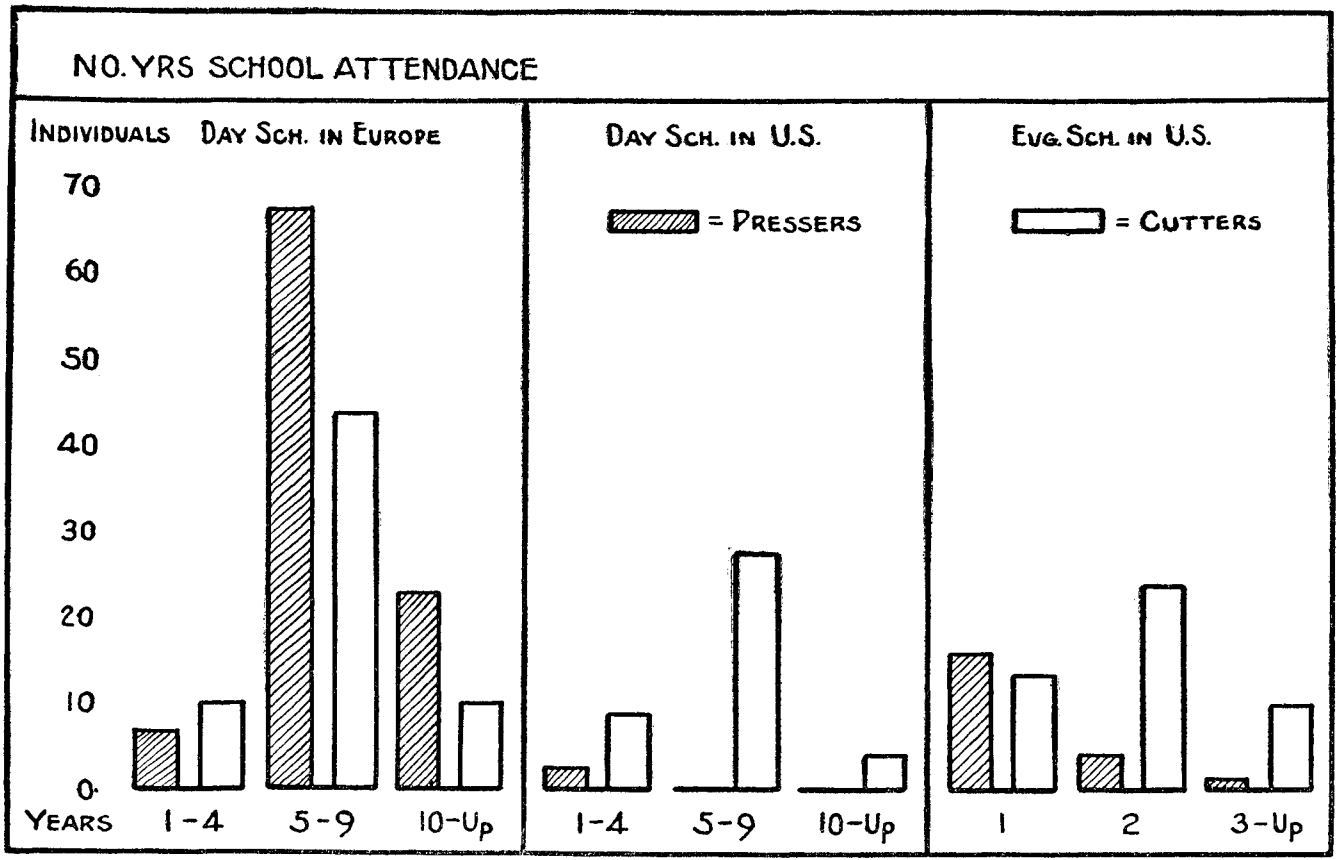


CHART 24.—SCHOOL ATTENDANCE OF 100 PRESSERS AND 100 CUTTERS.

TABLE R.—SCHOOL ATTENDANCE, BY AGE GROUPS.

Age group (years).	Total.	Number reporting no schooling.	Number reporting given number of years of day schooling.								Number reporting given number of years of evening schooling in United States.				
			In Europe.				In United States.								
			0 yrs.	1 to 4 yrs.	5 to 9 yrs.	10 yrs. and over.	0 yrs.	1 to 4 yrs.	5 to 9 yrs.	10 yrs. and over.	0 yrs.	1 yr.	2 yrs.	3 yrs.	4 yrs. and over.
PRESSERS.															
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	8	.....	.....	2	5	1	7	1	.....	.....	4	4	.....	.....	.....
25 to 29	20	1	.....	2	13	4	18	1	.....	.....	13	4	2	.....	.....
30 to 34	15	.....	.....	1	10	4	15	.....	.....	.....	12	2	1	.....	.....
35 to 39	27	.....	.....	2	17	8	27	.....	.....	.....	23	3	.....	.....	1
40 to 44	9	.....	.....	.....	7	2	9	.....	.....	.....	5	3	1	.....	.....
45 to 49	11	1	.....	.....	8	2	10	.....	.....	.....	10	.....	.....	.....	.....
50 and over	10	.....	.....	1	7	2	10	.....	.....	.....	10	.....	.....	.....	.....
Total	100	2	.....	8	67	23	96	2	.....	.....	77	16	4	.....	1
CUTTERS.															
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	4	.....	3	.....	1	.....	1	.....	3	.....	3	.....	1	.....	.....
21 to 24	21	.....	6	4	10	1	11	2	7	1	10	4	4	2	1
25 to 29	25	.....	8	3	10	4	16	4	5	.....	11	2	8	2	2
30 to 34	17	.....	6	1	8	2	10	1	5	1	8	3	4	1	1
35 to 39	12	.....	5	1	6	.....	7	2	2	1	6	2	3	1	.....
40 to 44	11	1	5	1	3	1	6	.....	3	1	6	1	3	.....	.....
45 to 49	4	.....	.....	.....	2	2	4	.....	.....	.....	2	1	1	.....	.....
50 and over	6	.....	2	.....	4	.....	4	.....	2	.....	6	.....	.....	.....	.....
Total	100	1	35	10	44	10	59	9	27	4	52	13	24	6	4

COMMAND OF LANGUAGE.

The last section of the schedule consisted of questions as to the languages the individual is able to speak, read, and write. The results, as presented in Tables S to Y, are far from satisfactory as a basis upon which to make detailed comparisons. The unreliability of data secured in the manner described has already been pointed out. It is possible that in the inquiry as to the number of languages these subjects can speak, read, and write, the influence of suggestion played some part in determining the answers.

The original intention was to prepare a series of tests for dictation and oral and written exercises, the use of which would have made possible a more accurate measure of ability. Series of sentences in each of the different languages, arranged in ascending order of difficulty of comprehension or of expression, given with a time limit or some other easily applied uniformity of method, would have yielded more valuable results than were here actually obtained. Consideration of the amount of time and effort that would have been entailed by such a procedure, the possible unwillingness to cooperate on the part of the subjects, and the probable significance of the results in comparison with what it was hoped could be secured by a much simpler method, resulted in the decision to adopt the latter.

It is believed that the results of the inquiry, crude as it was, are sufficiently significant to be worthy of presentation, at least in the following particulars:

1. For the evidence given as to the polyglot character of the people engaged in these two occupations, reflecting to a considerable degree the conditions in the entire industry.

2. For a comparison of the pressers and cutters with respect to the use of Yiddish, suggesting the extent to which the industry is influenced by racial considerations.

3. For a comparison with respect to the use of English, and by implication the extent of adjustment to American ideals and standards.

Taking up the question of Yiddish first, the tables show that 9 pressers speak Yiddish only, 1 speaks Yiddish and English, 1 speaks Yiddish and Polish, and 19 speak their native language and Yiddish. Table Y presents an analysis of the facts reported in the last column of Table S, showing that all of those reporting ability to use more than two languages (70) speak Yiddish. All of the 100 pressers, therefore, speak Yiddish; and by a similar calculation it is shown that 52 pressers speak English. The corresponding numbers for cutters are: 82 speak Yiddish; 85 speak English.

Tables U and V show that all but 8 pressers reported ability to read, and all of the 8 unable to read were 25 years of age or over; 24 pressers read one language only, Yiddish, while 19 cutters read one language only; in 16 cases, English. Combining the data in Tables U and Y, 90 pressers report ability to read Yiddish, and 35 ability to read English; whereas 68 cutters read Yiddish and 81 read English.

Tables W and X show that 12 pressers, ranging in age from 25 to over 50 years, were unable to write; 22 pressers write one language only, Yiddish, while 25 cutters write one language only, of whom 20 write English. Combining the data in Tables W and Y, 88 pressers report ability to write Yiddish, and 33 ability to write English; whereas 65 cutters write Yiddish, and 81 English. Charts 18 and 19 (pp. 146 and 147) present a summary of the more important figures in graphic form.

TABLE S.—LANGUAGE-SPEAKING ABILITY REPORTED, BY COUNTRY OF BIRTH.

Country of birth.	Total.	One language only.		Two languages.						More than two languages.
		English.	Yiddish.	Yiddish and—		Native and—			Total.	
				English.	Polish.	English.	Yiddish.	German.		
PRESSERS.										
Russia	70	.....	8	1	1	.....	15	.....	17	45
Russian Poland	5	.....	.....	.....	.....	.....	.....	.....	.....	5
Austria-Hungary	5	.....	1	.....	.....	.....	.....	.....	.....	4
Austrian Poland	19	.....	.....	.....	.....	.....	3	.....	3	16
Roumania	1	.....	.....	.....	.....	.....	1	.....	1	.....
Total	100	.....	9	1	1	.....	19	.....	21	70
CUTTERS.										
Russia	46	.....	.....	11	.....	.....	.....	.....	11	35
Russian Poland	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Austria-Hungary	11	.....	.....	4	.....	.....	.....	.....	4	7
Austrian Poland	12	.....	.....	1	.....	.....	.....	.....	1	11
Roumania	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Germany	4	.....	.....	.....	.....	4	.....	.....	4	.....
France	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Italy	2	.....	.....	.....	.....	1	.....	.....	1	1
United States	21	2	.....	.....	.....	.....	10	4	14	5
England	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Total	100	4	.....	16	.....	5	10	4	35	61

TABLE T.—LANGUAGE-SPEAKING ABILITY REPORTED, BY AGE GROUPS.

Age group (years).	Total.	One language only.		Two languages.						More than two languages.
		English.	Yiddish.	Yiddish and—		Native and—			Total.	
				English.	Polish.	English.	Yiddish.	German.		
PRESSERS.										
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	8	.....	2	1	.....	.....	1	.....	2	4
25 to 29	20	.....	3	.....	.....	.....	3	.....	3	14
30 to 34	15	.....	1	.....	.....	.....	2	.....	2	12
35 to 39	27	.....	1	.....	1	.....	6	.....	7	19
40 to 44	9	.....	1	.....	.....	.....	1	.....	1	7
45 to 49	11	.....	1	.....	.....	.....	4	.....	4	6
50 and over	10	.....	.....	.....	.....	.....	2	.....	2	8
Total	100	.....	9	1	1	.....	19	.....	21	70
CUTTERS.										
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	4	.....	.....	1	.....	.....	2	.....	3	1
21 to 24	21	.....	.....	6	.....	1	1	.....	8	13
25 to 29	25	.....	.....	3	.....	.....	5	.....	8	17
30 to 34	17	.....	.....	3	.....	.....	2	1	6	11
35 to 39	12	1	.....	3	.....	.....	.....	.....	3	8
40 to 44	11	2	.....	.....	.....	2	.....	1	3	6
45 to 49	4	1	.....	.....	.....	.....	.....	.....	.....	3
50 and over	6	.....	.....	.....	.....	2	.....	2	4	2
Total	100	4	.....	16	.....	5	10	4	35	61

TABLE U.—LANGUAGE-READING ABILITY REPORTED, BY COUNTRY OF BIRTH.

Country of birth.	Total.	One language only.		Two languages—									Total.	More than two languages.
				Yiddish and—			Native and—					German and English.		
		English.	Yiddish.	English.	Polish.	Hebrew.	English.	Yiddish.	German.	Polish.	French.			
PRESSERS.														
Russia	70	.....	18	1	1	.....	.....	18	.....	1	.....	.....	21	27
Russian Poland	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Austria-Hungary	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Austrian Poland	19	.....	4	.....	.....	.....	.....	2	.....	.....	.....	.....	2	11
Roumania	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Total	100	.....	24	1	1	.....	.....	21	.....	1	.....	.....	24	44
CUTTERS.														
Russia	46	2	2	13	.....	1	.....	4	.....	.....	.....	.....	18	24
Russian Poland	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austria-Hungary	11	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	2	7
Austrian Poland	12	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	10
Roumania	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Germany	4	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	4	.....
France	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Italy	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....
United States	21	10	.....	.....	.....	.....	.....	3	5	.....	1	.....	9	2
England	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100	16	3	15	.....	1	6	8	5	.....	1	1	37	44

TABLE V.—LANGUAGE-READING ABILITY REPORTED, BY AGE GROUPS.

Age group (years).	Total.	One language only.		Two languages—									Total.	More than two languages.
				Yiddish and—			Native and—					German and English.		
		English.	Yiddish.	English.	Polish.	Hebrew.	English.	Yiddish.	German.	Polish.	French.			
PRESSERS.														
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	8	.....	2	1	.....	.....	.....	2	.....	.....	.....	.....	3	3
25 to 29	20	.....	5	.....	.....	.....	.....	1	.....	.....	.....	.....	1	12
30 to 34	15	.....	1	.....	.....	.....	.....	4	.....	.....	.....	.....	4	8
35 to 39	27	.....	6	.....	1	.....	.....	7	.....	1	.....	.....	9	11
40 to 44	9	.....	4	.....	.....	.....	.....	2	.....	.....	.....	.....	2	3
45 to 49	11	.....	5	.....	.....	.....	.....	2	.....	.....	.....	.....	2	3
50 and over	10	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	3	4
Total	100	.....	24	1	1	.....	.....	21	.....	1	.....	.....	24	44
CUTTERS.														
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	4	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	21	1	.....	6	.....	.....	1	2	.....	.....	.....	.....	9	11
25 to 29	25	3	.....	7	.....	1	.....	2	1	.....	.....	.....	11	11
30 to 34	17	2	1	2	.....	.....	.....	1	1	.....	.....	1	5	9
35 to 39	12	3	1	.....	.....	.....	1	1	.....	.....	1	.....	3	5
40 to 44	11	3	.....	.....	.....	.....	2	1	1	.....	.....	.....	4	4
45 to 49	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
50 and over	6	.....	.....	.....	.....	.....	2	1	2	.....	.....	.....	5	1
Total	100	16	3	15	.....	1	6	8	5	.....	1	1	37	44

TABLE W.—LANGUAGE-WRITING ABILITY REPORTED, BY COUNTRY OF BIRTH.

Country of birth.	Total.	One language only.		Two languages—										More than two languages.
				Yiddish and—			Native and—					German and English.	Total.	
		English.	Yiddish.	English.	Polish.	Hebrew.	English.	Yiddish.	German.	Polish.	French.			
PRESSERS.														
Russia	70	.....	18	2	1	1	.....	19	.....	1	.....	.....	24	22
Russian Poland	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Austria-Hungary	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Austrian Poland	19	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	2	11
Roumania	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Total	100	.....	22	2	1	1	.....	22	.....	1	.....	.....	27	39
CUTTERS.														
Russia	46	4	3	10	.....	1	.....	4	.....	.....	.....	.....	15	24
Russian Poland	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austria-Hungary	11	1	2	2	.....	.....	.....	.....	.....	.....	.....	.....	2	6
Austrian Poland	12	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	10
Roumania	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Germany	4	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	4	.....
France	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Italy	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....
United States	21	12	.....	.....	.....	.....	.....	2	4	.....	1	.....	7	2
England	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	100	20	5	12	.....	1	6	7	4	.....	1	1	32	43

TABLE X.—LANGUAGE-WRITING ABILITY REPORTED, BY AGE GROUPS.

Age group (years).	Total.	One language only.		Two languages—										More than two languages.
				Yiddish and—			Native and—					German and English.	Total.	
		English.	Yiddish.	English.	Polish.	Hebrew.	English.	Yiddish.	German.	Polish.	French.			
PRESSERS.														
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	8	.....	3	1	.....	.....	.....	1	.....	.....	.....	.....	2	3
25 to 29	20	.....	3	.....	.....	.....	.....	2	.....	.....	.....	.....	2	11
30 to 34	15	.....	1	.....	.....	.....	.....	6	.....	.....	.....	.....	6	6
35 to 39	27	.....	5	.....	1	1	.....	7	.....	1	.....	.....	10	10
40 to 44	9	.....	4	.....	.....	.....	.....	1	.....	.....	.....	.....	1	3
45 to 49	11	.....	5	1	.....	.....	.....	2	.....	.....	.....	.....	3	2
50 and over	10	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	3	4
Total	100	.....	22	2	1	1	.....	22	.....	1	.....	.....	27	39
CUTTERS.														
Under 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18 to 20	4	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 to 24	21	3	.....	5	.....	.....	1	1	.....	.....	.....	.....	7	11
25 to 29	25	4	1	5	.....	1	.....	2	1	.....	.....	.....	9	11
30 to 34	17	3	1	2	.....	.....	.....	1	.....	.....	.....	1	4	9
35 to 39	12	3	1	.....	.....	.....	1	1	.....	.....	1	.....	3	5
40 to 44	11	3	.....	.....	.....	.....	2	1	1	.....	.....	.....	4	4
45 to 49	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
50 and over	6	.....	1	.....	.....	.....	2	1	2	.....	.....	.....	5	.....
Total	100	20	5	12	.....	1	6	7	4	.....	1	1	32	43

TABLE Y.—COMMAND OF ENGLISH AND YIDDISH BY THOSE REPORTING ABILITY TO USE MORE THAN TWO LANGUAGES.

Occupation.	Number able to use more than two languages.			English: Ability to—			Yiddish: Ability to—		
	Speak.	Read.	Write.	Speak.	Read.	Write.	Speak.	Read.	Write.
Pressers	70	44	39	51	34	31	70	43	40
Cutters	61	44	43	60	43	42	56	41	40

From Table S it appears that 70 pressers and 61 cutters speak more than two languages; 9 pressers speak one language only, Yiddish; 4 cutters speak one language only, but the language is English. The 9 pressers speaking only one language are distributed over six age groups, from 21 to 49 years; whereas the 4 cutters are all over 35 years of age and under 50.

About twice as many pressers (19) as cutters (10) speak their native language and Yiddish, of those speaking two languages only; but 16 cutters speak Yiddish and English, as against 1 presser.

In order to obtain a comparison in respect to speaking knowledge of Yiddish and English, it is necessary to combine the data separated in the tables in three sections.

SUMMARY.

For convenience of reference the more important facts that appear in the tables may be summarized, as follows:

Median age for 100 individuals: Pressers, 35 to 39; cutters, between 29 and 30.

Modal age group: Pressers, 35 to 39; cutters, 25 to 29.

Number who are 45 years of age or over: Pressers, one-fifth (21); cutters, one-tenth (10).

Number under 25: Pressers, one-twelfth (8); cutters, one-fourth, (25).

Number under 30: Pressers, about one-fourth (28); cutters, one-half (50).

Born in United States: Pressers, none; cutters, 21.

Born in Russia: Pressers, 70; Cutters, 46.

Median age for Russian born: Pressers, 35 to 39; cutters, 25 to 29.

Median age for American born: Cutters, 30 to 34.

Number who are married: Pressers, 92; Cutters, 66.

Percentage of married having no children: Pressers, 8.7; cutters, 27.3.

Children in families of the married: Pressers, average, 3.4, median, 3; cutters, average, 1.7, median, 1.

Percentage married of those under 30 years of age: Pressers, 78.6, average number of children, 1.82; cutters, 42, average number of children, 0.76.

Percentage married of those 40 years of age or over: Pressers, 100, average number of children, 5.2; cutters, 85.7, average number of children, 2.8.

Comparing pressers and cutters of the same age groups, not only is marriage more common among pressers, but the number of children per family is progressively greater.

Median age at entrance into the industry: Pressers, 25 to 29; cutters, 18 to 20.

Number entering the industry under 21 years of age: Pressers, 18; cutters, 68. Under 18 years of age: Pressers, 3; cutters, 38.

Number entering the industry after 30 years of age: Pressers, 35; cutters, 6.

Percentage of Russian born who entered the industry under 21 years of age: Pressers, 20; cutters, 69.6.

Percentage of American-born cutters who entered the industry under 21 years of age, 85.7, is higher than for any other nationality group having more than one representative.

Percentage of those 30 years of age or over who entered the industry under 21 years of age: Pressers, 4.2; cutters, 48. Comparing each age group separately, the cutters uniformly entered the industry at earlier ages than the pressers.

Median number of years individuals have been in the industry: Pressers, 7; cutters, 9.

Number of those 30 years of age or over who have been in the industry less than 7 years: Pressers, 24 out of 72, 33.3 per cent; cutters, 3 out of 50, 6 per cent.

Number of those 40 years of age or over who have been in the industry 15 years or over: Pressers, 11 out of 30, 36.7 per cent; cutters, 15 out of 21, 71.4 per cent.

Median number of years in United States for those of foreign birth: Pressers, 7; cutters, 11. With the exception of the single age group, 25 to 29, the median number of years in the United States is consistently greater at all ages for cutters than for pressers.

Number of those 35 years of age or over who have been in United States less than 10 years: Pressers, 29 out of 57, 50.9 per cent; cutters, 2 out of 25, 8 per cent.

Number of those 40 years of age or over who have been in United States more than 15 years: Pressers, 11 out of 30, 36.7 per cent; cutters, 10 out of 15, 66.7 per cent.

Number of those foreign born who entered the industry within a year after arrival in the United States: Pressers, 84 out of 96, 87.5 per cent; cutters, 36 out of 78, 46.2 per cent.

Of 40 foreign-born cutters under 30 years of age, 18 entered the industry within a year after arrival in this country, and the same is

true of 18 out of 38 who are 30 years of age or over, indicating no significant difference between the younger and the older groups.

Only 5 pressers and 5 cutters learned their trades before coming to this country.

Previous occupations in Europe include:

	Pressers.	Cutters.
Present occupation	5	5
Profession	4	6
Skilled trade	23	4
Salesman, or in business	48	28
Farm, or forestry	3	3
Miscellaneous	11	2
No occupation reported	6	31
	100	79

The proportion of those who learned their trade in any other way than "on the job" is small, including none of the pressers and only 7 cutters, of whom 5 report having served apprenticeship, one learned his trade from a relative, and one by private instruction.

Number of those having one year or more of day schooling in Europe: Pressers, 98; cutters, 64 (81 per cent of the foreign-born cutters).

Number of those having one year or more of day schooling in United States: Pressers, 2; cutters, 40.

Number of those having one year or more of evening-school attendance in United States: Pressers, 21; cutters, 47. Number having 2 years or more: Pressers, 5; cutters, 34.

Number of those under 30 years of age who have had 5 years or more of schooling in Europe: Pressers, 23, 83.1 per cent; cutters, 26, 52 per cent. Having 5 years of day schooling in United States: Pressers, none; cutters, 16, 32 per cent. Having one year or more of evening schooling in United States: Pressers, 10, 35.7 per cent; cutters, 26, 52 per cent.

Number of those 30 years of age or over who have had 5 years or more of schooling in Europe: Pressers, 67, 93.1 per cent; cutters, 28, 56 per cent. Having one year or more of day schooling in United States: Pressers, none; cutters, 18, 36 per cent. Having one year or more of evening school in United States: Pressers, 11, 15.3 per cent; cutters, 21, 42 per cent.

Tables S to Y.—Number of pressers who speak two or more languages, 91; cutters, 96. Number who read two or more languages: Pressers, 68; cutters, 81. Number who write two or more languages: Pressers, 66; cutters, 75.

Number of pressers reporting inability to read, 8; inability to write, 12; there are no cutters reporting inability to read or write.

The differences between the numbers of pressers and cutters who speak, read, and write one language only, respectively, are not large enough to be significant in themselves, but when the languages are taken into consideration it is seen that the groups thus compared are made up of entirely different elements. Number who speak one language only: Pressers, 9, Yiddish; cutters, 4, English. Number who read one language only: Pressers, 24, Yiddish; cutters, 19, of whom 16 read English. Number who write one language only: Pressers, 22, Yiddish; cutters, 25, of whom 20 write English.

Comparing pressers and cutters with respect to ability to use Yiddish and English, irrespective of command of other languages, very decided differences in the composition of the two groups are found. Number who speak Yiddish: Pressers, 100; cutters, 82. Number who read Yiddish: Pressers, 90; cutters, 68. Number who write Yiddish: Pressers, 88; cutters, 65. Number who speak English: Pressers, 52; cutters, 85. Number who read English: Pressers 35; cutters, 81. Number who write English: Pressers, 33; cutters, 81.

APPRENTICESHIP PLAN FOR CUTTERS.

In the inquiry concerning the method of learning the trade, apprenticeship was interpreted somewhat narrowly to mean a formal, definitely organized plan of learning and teaching a trade, involving a contractual relation with mutual obligations. In this sense, as noted, there is no apprenticeship system for either pressers or cutters in this industry at the present time, and there has been none in recent years. The necessity for some means that will accomplish the training of beginners and raise the general average of skill and efficiency exists in both occupations now as in the past, however, and the practical disappearance of apprenticeship has stimulated the development of various private agencies for the purpose and of informal agreements between employer and employee.

Examples of these arrangements will be found referred to in the individual histories, pages 142 to 145. In some cases the employer, or the foreman, or a fellow workman undertakes to teach the beginner for a financial consideration—a plan which, it is pretty well understood, works to the disadvantage of both worker and employer. It is not a good plan for the worker, for in its informality there is no guaranty of protection or consideration of his rights, and, as a matter of fact, there is usually great discrepancy between what he is led to expect to have done for him and the service actually rendered. The plan is equally unsatisfactory to the employer, especially when it is carried on surreptitiously, as it frequently is.

Other attempts to meet the situation have resulted in the organization of so-called cutting or designing schools. These are for the

most part small establishments, lacking in adequate facilities for imparting a practical training.

In the case of pressers the usual conditions of the factory shop seem to make it possible for the ordinary individual without experience or special training to acquire the necessary skill on the job and work up to a fairly satisfactory wage-earning status in a reasonable length of time. There are those among both employers and employees, however, who believe that the industry is seriously handicapped by the lack of suitable provision for a supply of skilled cutters.

Recognizing this favorable attitude on both sides, it was decided to undertake the formulation of an apprenticeship plan for cutters. With this object in view, a series of conferences was arranged with a number of skilled mechanics from among the officers of the Cutters' Union, Local No. 10, at which the entire field was gone over very carefully and in great detail.

After each conference the points developed and discussed to the stage of agreement were reduced to writing, and copies distributed at the next meeting for further discussion and revision. The final result of several weeks of this process appears in the following pages:

RULES AND PLAN OF PROCEDURE ADOPTED BY THE JOINT BOARD OF EXAMINERS FOR CUTTERS' APPRENTICES.[1]

The Cloak, Suit, and Skirt Manufacturers' Protective Association, of New York City, and the Joint Board of Local Unions of the International Ladies' Garment Workers' Union, of New York City, hereby mutually agree and concur in the organization of a joint board of examiners for cutters' apprentices for the cloak, suit, and skirt industry of Greater New York, to be governed by the following rules and plan of procedure:

I. Immediately upon the adoption of these rules and plan of procedure, the parties to this agreement shall appoint, respectively, three (3) persons representing the association, and three (3) persons representing the cutters' union, who shall constitute themselves into a board, and shall thereafter be known as "The joint board of examiners for cutters' apprentices." Hereafter in these rules it will be referred to as "the board."[2]

II. The board shall immediately elect two chairmen, one from each side, who shall preside alternately for two weeks. These officers shall hold office for one year, or until their successors are elected.

III. The members of the board shall be appointed by the parties to this agreement, as follows: One representative from each side for a term of one year; one representative from each side for a term of two years; and one representative from each side for a term of three years. Thereafter, one representative from each side shall be appointed each year for a term of three years, and the term of office for members of the board shall be three years, or until their successors are appointed.

[1] After this agreement had been formulated, as the result of the series of conferences as noted elsewhere, it was used by representatives of the National Society for the Promotion of Industrial Education as a model in drafting a similar agreement to be submitted to the unions and manufacturers in the dress and waist industry. See Bulletin No. 145.

IV. As soon as practicable after its organization, the board shall appoint two deputy examiners, to be hereafter known as clerks, one representative of each side, who shall act as joint secretaries of the board.

V. The duties of the clerks shall include:

1. The maintenance of a system of card records, certificates of apprenticeship, and other forms, as may be determined hereafter by the board.

2. The examination of apprentices, and applicants for admission to the industry as cutters, at such times and in such manner as may be determined hereafter by the board.

3. Such other duties as may be determined hereafter by the board.

VI. The parties to this agreement shall defray, in equal proportions, the actual and necessary expenses of the board. The services of members of the board shall be rendered without compensation. The compensation of the clerks shall be determined by mutual agreement of the parties to this agreement, and paid by the same in equal proportions.

VII. A chairman shall preside at all meetings of the board.

VIII. Four (4) members, including two representatives from each side, shall constitute a quorum of the board for the transaction of business.

IX. The board shall meet at such times and places, or in accordance with such regular program or schedule, as shall be determined hereafter by mutual agreement at any regular meeting of the board.

X. The board shall have general jurisdiction over the cutters' apprentices in the cloak, suit, and skirt industry in Greater New York from the time of entrance into the industry until the attainment of the status of full journeyman cutter, including the examination and certification of all candidates for apprenticeship or for admission to the industry as cutters, and the enforcement of such rules and regulations as shall be hereafter adopted. All applications for admission to apprenticeship shall be made through the board.

XI. The following conditions governing grades of apprenticeship, length of service, and minimum weekly wage shall prevail.

PROPOSED GRADES, DEFINITION, LENGTH OF SERVICE, AND MINIMUM WEEKLY WAGE.

Grade 1.—Canvas cutter—grade A (rough canvas): This term is to mean the cutting of canvas or percaline larger than the cloth, where the cloth is cut exact, leaving it to the operator or finisher to trim the canvas exactly to the cloth after the stitching around the seams. Period of service, 6 months; minimum weekly wage, $6.

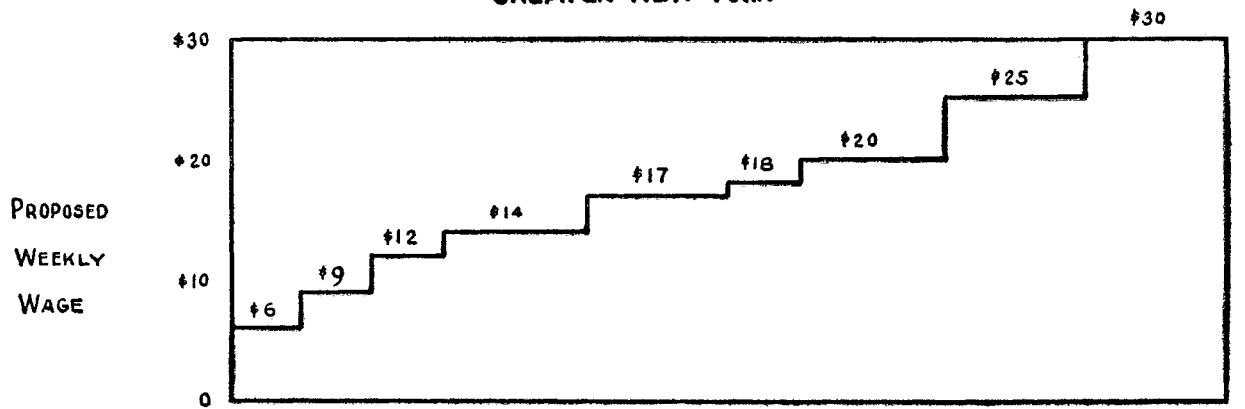
Grade 2.—Canvas cutter—grade B (canvas exact): This term is to mean the cutting of the canvas or percaline exactly to the pattern for those parts of the garment where the class of material or the style of the garment require it. Period of service, 6 months; minimum weekly wage, $9.

Grade 3.—Canvas cutter—grade C (full canvas cutter): This term is to mean that the worker must be able to take the direction card with the lot of garments as cut and cut the canvas or percaline required for the lot, according to the direction card. Period of service, 6 months; minimum weekly wage, $12.

Grade 4.—Lining cutter—grade A: This term is to mean the cutting of linings upon markers supplied by the trimmer. Period of service, 12 months; minimum weekly wage, $14.

Grade 5.—Lining cutter—grade B: This term is to include the marking of linings and the exact cutting of same, also the exact cutting of all outside trimmings. No apprentice of this grade shall be employed in any shop that does not also employ, at the same time, a full journeyman mechanic in the trimming department. Period of service, 12 months; minimum weekly wage, $17.

PROPOSED APPRENTICESHIP GRADES AND WAGES
CLOAK, SUIT, AND SKIRT INDUSTRY
GREATER NEW YORK



	CANVAS			LINING		CLOTH		JOURNEYMAN	
GRADE	A	B	C	A	B	A	B		
	1	2	3	4	5	6	7		
DURATION (MONTHS)	6	6	6	12	12	6	12		
AVERAGE AGE	17	18		19	20	21		22	23

Grade 6.—Cloth cutter—grade A: This term is to mean the cutting of cloth upon markers supplied by the cloth cutter. Period of service, 6 months; minimum weekly wage, $18.

Grade 7.—Cloth cutter—grade B: This term is to include the marking and cutting of all cloth required for a garment. No apprentice of this grade shall be employed in any shop that does not also employ, at the same time, a full journeyman cutter. Period of service, 12 months; minimum weekly wage, $20.

XII. As soon as practicable after its organization, the board shall formulate and announce arrangements for the examination and certification of all cutters now employed in the industry or to be employed hereafter, and shall proceed to carry the same into effect.

XIII. The following rules and regulations shall govern the apprenticeship system for cutters:

1. Applicants for admission to the trade as cutters' apprentices must be not less than sixteen (16) years of age. No applicant may be admitted to apprenticeship who has passed his eighteenth (18th) birthday.

2. The board shall draft a suitable blank form of application for admission to the trade as an apprentice of grade 1, which shall be filled out by each applicant. Each such application must be indorsed by the prospective employer of the apprentice.

3. The board shall furnish to each successful applicant a certificate, valid in any shop in the industry, permitting the holder to work as an apprentice cutter of grade 1. Upon the submission by the holder of a grade 1 certificate of proof of six months' service in grade 1, the board shall issue in exchange therefor a certificate permitting the holder to work as an apprentice cutter of grade 2. Similarly, upon the submission by the holder of a grade 2 certificate of proof of six months' service in grade 2, the board shall issue in exchange therefor a certificate permitting the holder to work as an apprentice cutter of grade 3.

4. No apprentice shall be permitted to apply for an examination for entrance upon grade 4 until after a minimum total period of service, in one or more shops, of 18 months.

5. Beginning with grade 3, there shall be an examination of each apprentice at the completion of service in each grade, in order to authorize promotion into the next grade. After such examination, the board shall furnish to each successful applicant an appropriate certificate.

6. Beginning with grade 4, the board may permit a shortening of the proposed periods of service, to not less than a minimum of two-thirds ($\frac{2}{3}$) of the total time required, for individuals of demonstrated exceptional ability; and shall require longer periods of service than the maximums designated from individuals who show inability to meet the requirements.

7. The board shall draft a suitable blank form of application for examination which shall be filled out by each applicant, and shall determine the conditions under which requests for examination will be granted.

8. No apprentice shall be employed on work of a grade higher than that for which he holds a certificate issued by the board.

9. Provision shall be made in the industry, through the joint action of the parties to this agreement, for a system of training supplementary to the work of the shops, under the control of the board, for the purpose of facilitating and encouraging individual advancement.

10. Whenever provision shall have been made for the establishment of a system of supplementary training, the following principles shall govern the operation of the same:

a. The work of the proposed school, or classes, shall be carried on principally during the slack seasons.

b. The apprentice shall be required to pay into the treasury of the board a weekly assessment, to be hereafter determined, during the period while he is employed.

c. The employer shall pay into the treasury of the board a weekly assessment, to be hereafter determined, for each apprentice in his employ, during the period while the apprentice is receiving instruction in the classes provided by the board.

d. The funds acquired by the treasury of the board, as provided herein, shall be used toward defraying the necessary expenses incurred in the instruction of apprentices under its control.

e. The necessary expenses incurred in the instruction of apprentices by the board, as provided herein, over and above the amounts received in assessments, shall be defrayed by contributions from the parties to this agreement in equal proportions.

XIV. The employment of apprentices shall be subject to the following conditions:

1. The number of apprentices in any shop shall be determined by the number of full journeymen cutters employed therein. The number of apprentices to which any shop shall be entitled, therefore, shall vary with the season.

2. Any shop employing one (1) or more full journeymen cutters shall be entitled to one apprentice of any grade.

3. Any shop employing six (6) or more full journeymen cutters shall be entitled to two (2) apprentices.

4. Any shop employing nine (9) or more full journeymen cutters shall be entitled to three (3) apprentices.

5. No shop shall be entitled to more than one (1) apprentice of the same grade nor to more than a total of three (3) apprentices at any one time.

6. After the completion of his apprenticeship, the graduate apprentice shall not be eligible to employment in the shop in which he completes his apprenticeship in preference to other mechanics already employed therein.

PROPOSED FORM OF APPRENTICE CERTIFICATE.

APPRENTICE CERTIFICATE—grade 1. No.....

Canvas cutter—grade A.

JOINT BOARD OF EXAMINERS FOR CUTTERS' APPRENTICES, CLOAK, SUIT, AND SKIRT INDUSTRY, GREATER NEW YORK.

Office, — West —th St. Telephone, Gramercy —.

Mr.....

Address.....

is entitled to work as an apprentice canvas cutter, grade A, while employed by

.....

Address.....

Issued.....1914. .....*Clerk.*

NOTE.—The holder of this certificate is required to report weekly to the office of the joint board of examiners.

Print certificates on stock approximately 3 by 5 inches, using a different color for each grade of certificate.

Provide a suitable leather pocketbook in which to carry the certificate, similar to the books in which traveling men carry railroad passes. The book should have two flaps made of celluloid, under one of which the certificate should be slipped, while under the other a photograph of the holder should be sewed.

Provide a copy of the "Rules and regulations" in small booklet form, for insertion in a pocket in the certificate book.

Print on the reverse side of the certificate the following notice:

NOTE.—The attention of the apprentice is directed to the circular of instructions containing extracts from "The rules and plan of procedure adopted by the joint board of examiners for cutters' apprentices."

OUTLINE OF EXAMINATIONS SUGGESTED TO DETERMINE PROMOTIONS.

Examination at end of grade 3, for entrance into grade 4.

1. State what is meant by cutting canvas in the rough.
2. State what is meant by cutting canvas exact.
3. State what parts of a jacket require canvas.
4. Describe two of these parts.
5. Describe the kinds of garments that require the cutting of canvas exact.
6. State what is meant by the foundation of a garment.
7. Without a direction card, how would you find out what canvas parts are required in a garment?
8. Describe the parts of the canvas that are to be cut straight, and the parts that are to be cut on the bias.
9. Practical test: Supply the candidate with a set of patterns, cutting tickets, and the necessary materials. Required: To cut out the canvas exact for one pattern, six up, according to instructions on the cutting ticket.

Examination at end of grade 4, for entrance into grade 5.

1. On a two-sized lay of silk, would you face the lining? Why?
2. What silks have a right side and a wrong side?
3. Upon receiving a single-sized marker, on the open, how would you lay up the silk?
4. Practical test: Supply the candidate with a marker, cutting tickets, and the necessary materials. Required: To lay up the goods ready for cutting.

Examination at end of grade 5, for entrance into grade 6.

1. Describe the parts of the suit that are lined.
2. Describe what is meant by:
   a. A full-lined garment.
   b. A half-lined garment.
   c. A yoke-lined garment.
3. Describe how you would cut the linings for:
   a. A full-lined garment.
   b. A half-lined garment.
   c. A yoke-lined garment.
4. Describe what is meant by outside trimmings.
5. Describe how you would make a chart (or schedule) from the cutting tickets.
6. State several color schemes that provide satisfactory contrasts or combinations.
7. When is it necessary to use interlinings?
8. When is it necessary to use percaline?
9. Practical test: Supply the candidate with a set of patterns, cutting tickets, direction card, and the necessary materials. Required: To draft a chart from the cutting tickets, make a practical lay from the patterns and materials supplied, and a practical demonstration of satisfactory color schemes.

Examination at end of grade 6, for entrance into grade 7.

1. Describe the different cloth parts of:
   a. A jacket.
   b. A skirt.
   c. A cloak.
2. Describe the kinds of cloth that require to be cut in one direction only.
3. In cutting a garment on the open, when is it necessary to face the layers?
4. If the garment has a breast pocket, which side would you cut it in?
5. Practical test: Supply the candidate with marker, cutting tickets, and the necessary materials. Required: To lay up the goods ready for cutting.

Examination at end of grade 7, for status of full journeyman cutter.

STYLE NO. 745.

Shade.	*32*	*34*	*36*	*38*	*40*	*42*	*44*
Black.	..	1	..	1	1	..	..
Tan.	1	1	1	1	1	..	..
Brown.	..	1	1	1	..	..	..
Silver gray.	1	1	1	1	..	..	..

STYLE NO. 745.

Shade.	*32*	*34*	*36*	*38*	*40*	*42*	*44*
Black.	..	..	2	2	2	1	1
Gray.	..	1	..	1	..	..	..
Mahogany.	1	..	1	..	1	..	..
New blue.	1	1	1	1	1	1	1

STYLE NO. 745.

Shade.	*32*	*34*	*36*	*38*	*40*	*42*	*44*
Black.	..	..	1	1	1	1	1
Red.	..	1	2	2	..	..	..
Tan.	1	1	1	..	..	..	..

STYLE NO. 745.

Shade.	*32*	*34*	*36*	*38*	*40*	*42*	*44*
Black.	1	2	3	3	2	2	1
Blue.	1	2	3	3	1	1	..
Brown.	1	2	2	2	1	..	..
Green.	..	1	1	1	..	..	..

1. Given the foregoing orders: Make a chart, covering these orders, showing the method by which you would cut out the sizes required with the greatest economy of goods, together with the fewest number of markers.

2. A certain style of suit requires 3½ yards of goods in size 36. Given a piece of goods of 50 yards: How would you arrange your scale of 34, 36, 38, and 40 sizes in order to use up the piece to the best advantage?

3. Describe the effects produced by cutting velours with the nap, and against the nap.

4. How would you proceed to make a shaded lay?

5. Practical test: Supply the candidate with a set of patterns, cutting tickets, direction card, and the necessary materials, including plaids, striped goods, figured goods, and chevrons. Required: To draft a chart from the cutting ticket; to make a practical lay from the patterns and materials supplied; and to give a practical demonstration of the process of cutting a cloak or jacket with a longer or shorter waist than the pattern given.

EDUCATION FOR THE WORKERS IN THE INDUSTRY.

The facts which have been set forth in the foregoing pages emphasize two significant characteristics of pressers and cutters which must be taken account of in any plans for education: (1) The workers in these two occupations are predominantly a foreign-born non-English-speaking group; (2) They are distinctively an adult group, three-fourths of the cutters being 25 years of age or over, and three-fourths of the pressers being 30 years of age or over. The impression gained from visits to numerous factories, and confirmed by employers and union officials alike, is that these conditions are characteristic of the entire industry. Aside from cutters, the numbers of American born, or of those who are under 20 years of age, are almost negligible. With the exception of cutters, the industry at the present time seems to depend almost entirely for its supply of workers upon a stream of adult foreigners.

The results of the inquiry as to the amount and character of school training suggest that existing agencies are not contributing materially to the needs of these groups. Without doubt the explanation of this fact is found not in the inadequacy or unsuitability of the school facilities offered, but rather in human nature itself. Most of the workers concerned have passed well beyond the period when physical and intellectual plasticity afford conditions favorable to growth. Habits have become fixed, the responsibilities of family life have been assumed, aspiration and ambition are not what they once were—in short, the path to further progress and development is effectually blocked. It is scarcely necessary to point to the experience of evening schools everywhere which have been striving for decades to provide all kinds of classes to meet all kinds of needs, namely, that the great bulk of those who can and will avail themselves of educational opportunities are under 21 years of age.

Nevertheless, the industry is greatly in need of new types of workers. One of the needs, as has been pointed out already, is creative ability. Under the present system a large proportion of the garments produced, and new styles developed, represent the appropriation by the manufacturer of such ideas and suggestions, originated by others, as his agents are able to utilize. A fine garment is purchased abroad, brought to New York, and copied, with as many modifications and variations as the ingenuity of the designer will permit. It is practically a kind of conventionalized piracy that has attained to a certain status of respectability for the reason that "everybody is doing it." What the industry needs is a new class of workers—designers, cutters, tailors, etc.—who are able not only to adjust themselves to rapidly changing styles and turn readily and skillfully from the construction of one kind of garment to another, but also to originate and execute new ideas.

A second and equally important need is for workers possessing a higher degree of artistic temperament and appreciation, since the possession of the artistic quality of style means the difference between success and failure. The decision as to the lines of a garment is too often left to men who have no conception of the rules of design or the principles of art; the responsibility for choosing and adapting color schemes is frequently intrusted to those who lack even a rudimentary understanding of color harmony; and the details of ornamentation are often worked out with no more intelligence and esthetic appreciation than is required to manipulate a patchwork puzzle. Too much reliance is placed on rules of thumb and formulas whose meaning and derivation are quite beyond the comprehension of those who resort to them.

The obvious remedy, and the only remedy, for these conditions is more and better training for the workers. The requisite skill in

workmanship, artistic appreciation, and creative ability can be secured in no other way. It is equally obvious that very little can be accomplished in these directions by attempting to transform adult workers. Something can be done that is worth while, perhaps, but the hope of the industry is in the training of younger workers than those who constitute the vast majority in this industry. An effort must be made to find all those who are still young enough to be susceptible to the influence of training and to concentrate attention upon them.

The industry has undergone a significant evolution during the past 10 or 15 years, because of the tremendous increase in the demand for ready-made garments. The perfection of manufacturing processes, the development of factory organization, and the economies of large scale production have now made available for the great mass of the people garments of quality and serviceability that 25 years ago were within the reach of only the wealthy. It is very difficult to realize the enormous expansion in the volume of business that has taken place in recent years. The ready-made garment made its first appeal to the wearer of cheap clothing, and the product was inferior to that of the custom tailor both in materials and workmanship. With the development of the industry, however, the manufacturer has not only improved his product but he has steadily striven for higher and higher classes of customers. Some of the best designers and mechanics in the business are now in the employ of the better-grade cloak and suit manufacturers. The product of some of these factories contains materials of as high quality as the market affords, and the operatives who make the garments represent skill of as high grade as any at the command of the custom tailor. Since the differences in quality of material and workmanship have been so largely done away with, practically the only things that the custom tailor can supply his patron that can not be had from the manufacturer of ready-made garments are a certain exclusiveness and a kind of personal service. Even the advantage of exclusiveness is of short duration, in many cases, for the enterprising designer readily and promptly copies new ideas that give promise of becoming popular.

This invasion of the field of the medium and high priced garment, however, has created a real demand for workers with higher degrees of skill, and more of them. The industry faces the possibility of reaching the upper limits of development at an early date unless a supply of better-trained workers can be assured. Hence, the importance of the proposed scheme for apprenticeship and industrial training can be readily appreciated.

That development along the lines suggested is in the interests of the workers, as well as of the manufacturers, requires no demonstration. Increase in the qualifications referred to means direct and positive

increase in efficiency, and corresponding increase in earning capacity. If the industry is to rise to higher levels of artistic service and commercial success it can only be through suitable recognition of the importance of the worker's contribution toward that consummation.

COMMISSION ON INDUSTRIAL EDUCATION.

With due appreciation of the growing need for action, the unions and the manufacturers' association, in January, 1914, authorized the creation of a commission on industrial education, which should consider the problem and propose some solution. It was agreed that this commission should consist of nine members, three appointed by each of the two parties to the protocol, and three appointed by the board of arbitration. As a first step the board of arbitration was authorized to direct the bureau of statistics, which is responsible for this present study, to prepare in definite form proposals looking toward the development of a plan for the industrial and supplementary training of workers and apprentices. The following outline of the details of a plan for a part-time and factory school is presented in compliance with these instructions. The accompanying chart shows the proposed plan of organization and control.

PROPOSED PART-TIME AND FACTORY SCHOOL.

UNITS OF FIVE WEEKS.—Inspection of the figures collected in the study of wage statistics indicating the seasonal fluctuations in the industry shows that there are two periods each year, each several weeks in length, during which large numbers of employees are thrown out of work. In accordance with the provision of the apprenticeship agreement, the basis of the factory school is made two 10-week periods, so arranged as to coincide with the periods of highest unemployment. It is proposed, therefore, to operate a factory school for 10 weeks, from November 15 to February 1, and 10 weeks, from May 1 to July 15, in four units of 5 weeks each.

It is proposed, further, to operate a part-time school for 25 weeks, in 5 periods of 5 weeks each. Since the two parts of the plan together contemplate 45 weeks of school, there remain 7 weeks of vacation to complete the year. From the standpoint of both employers and employees the most favorable time to interrupt the school work is at the height of the busy season, when teachers and apprentices alike are most needed in the productive work of the factories. The seven weeks of vacation are divided, therefore, and three weeks are placed at the height of the spring season, and four weeks at the height of the fall season. The accompanying chart shows the program for the year by weeks and units, and the relation to seasonal fluctuations on

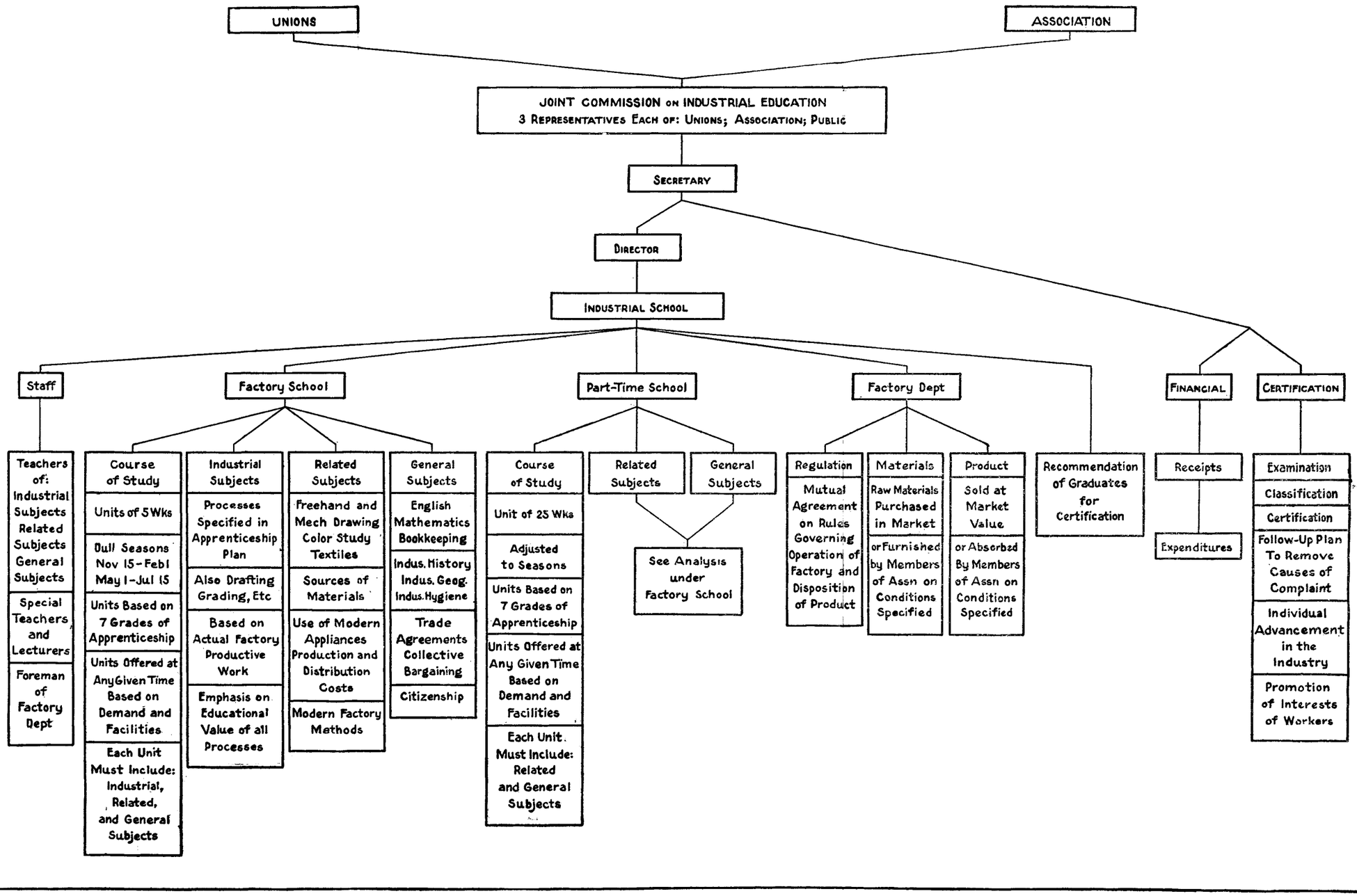
PLAN OF ORGANIZATION AND CONTROL FOR INDUSTRIAL SCHOOL

By JOINT AGREEMENT

JOINT BOARD OF AFFILIATED LOCAL UNIONS OF INTERNATIONAL LADIES' GARMENT WORKERS' UNION

AND CLOAK, SUIT, AND SKIRT MANUFACTURERS' PROTECTIVE ASSOCIATION

GREATER NEW YORK



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the basis of pay-roll data secured from 60 shops for the year August, 1912, to July, 1913.

SCHOOL DAY.—The program of the factory school provides for 6 hours' work daily from Mondays to Fridays, with morning sessions from 9 to 12, and afternoon sessions from 1 to 4, and morning sessions on Saturdays from 9 to 12. The plan of the part-time school proposes that each apprentice shall go to school for one session of 3 hours each week for a period of 25 weeks.

ATTENDANCE.—The apprentices who attend the factory school may or may not be the same ones who attend the part-time school. This is a matter to be determined, with others, when the final details are settled. The work of the factory school could be designed for apprentices most in need of training, while those who are more proficient could be provided for by the part-time units. In any event, attendance upon classes, and satisfactory completion of the work assigned, should count as fulfillment of a definitely recognized portion of apprenticeship service.

PAYMENT WHILE IN SCHOOL.—The question of the payment of apprentices for a part or all of the time spent in school attendance should be taken up for settlement by the parties to the agreement.

FACTORY SCHOOL.

COURSE OF STUDY.—It is proposed that the apprentice shall devote one-half of his school time to productive shopwork and the necessary instruction in industrial processes connected therewith, one-fourth to related subjects, and one-fourth to general subjects. The work is to be arranged in units of 5 weeks, based on the 7 grades of apprenticeship provided for. The units to be offered at any given time will naturally depend upon the grades of apprenticeship represented by those applying for instruction, and upon the facilities afforded by the school organization. Each unit of the course of study must include work in: (1) Industrial subjects; (2) Related subjects; (3) General subjects. The general content of the fields included under these heads is indicated in the following paragraphs:

PROGRAM.—The program is arranged so that two sections of apprentices work in the factory one-half of each day throughout the week, while two other sections devote the other half days throughout the week to related subjects and general subjects. This arrangement may continue through the 5 weeks, or it may be reversed on alternate weeks. (See "Teachers' schedules," p. 189.)

INDUSTRIAL SUBJECTS.—These include instruction that deals with and is directly based upon the processes specified in the apprenticeship plan. It should include also instruction in the drafting and grading of patterns, as well as other processes not specifically mentioned, but essential to the development of the skilled workman.

For the conduct of this part of the instruction the school is to be organized as a factory for actual productive work. Arrangements will be made by which members of the association will send in work to be done which will furnish the apprentices with practical problems such as arise in the regular course of business. While the school shopwork is to be organized on a factory basis, and every effort made to secure the highest possible standards of workmanship and efficiency, nevertheless the emphasis must be always on the educational value of the process and the advancement of the apprentice.

The productive work of the school factory is to be under the direction of a shop foreman, while a teacher of industrial subjects will be in charge of the instruction, and both will be responsible to the director. It will be necessary to select the shop foreman and the teacher of industrial subjects with a view to their ability to work together in sympathetic and hearty cooperation, on the basis of clearly defined principles worked out in conference with the director.

RELATED SUBJECTS.—By these are meant subjects of study directly related to the industrial processes carried on in the factory. The work in pattern drafting and grading should have a thorough grounding in the elements of freehand and mechanical drawing, and through appropriate study of color and textiles provision should be made for improvements in taste and esthetic appreciation, the necessity for which has already been pointed out. The sources of the important materials used in the industry should be made the subject of careful study. Attention should be given to the possibility of raising the standards of efficiency by the use of modern factory appliances and inventions, by a scientific study of production and distribution costs, and by the improvement of factory methods.

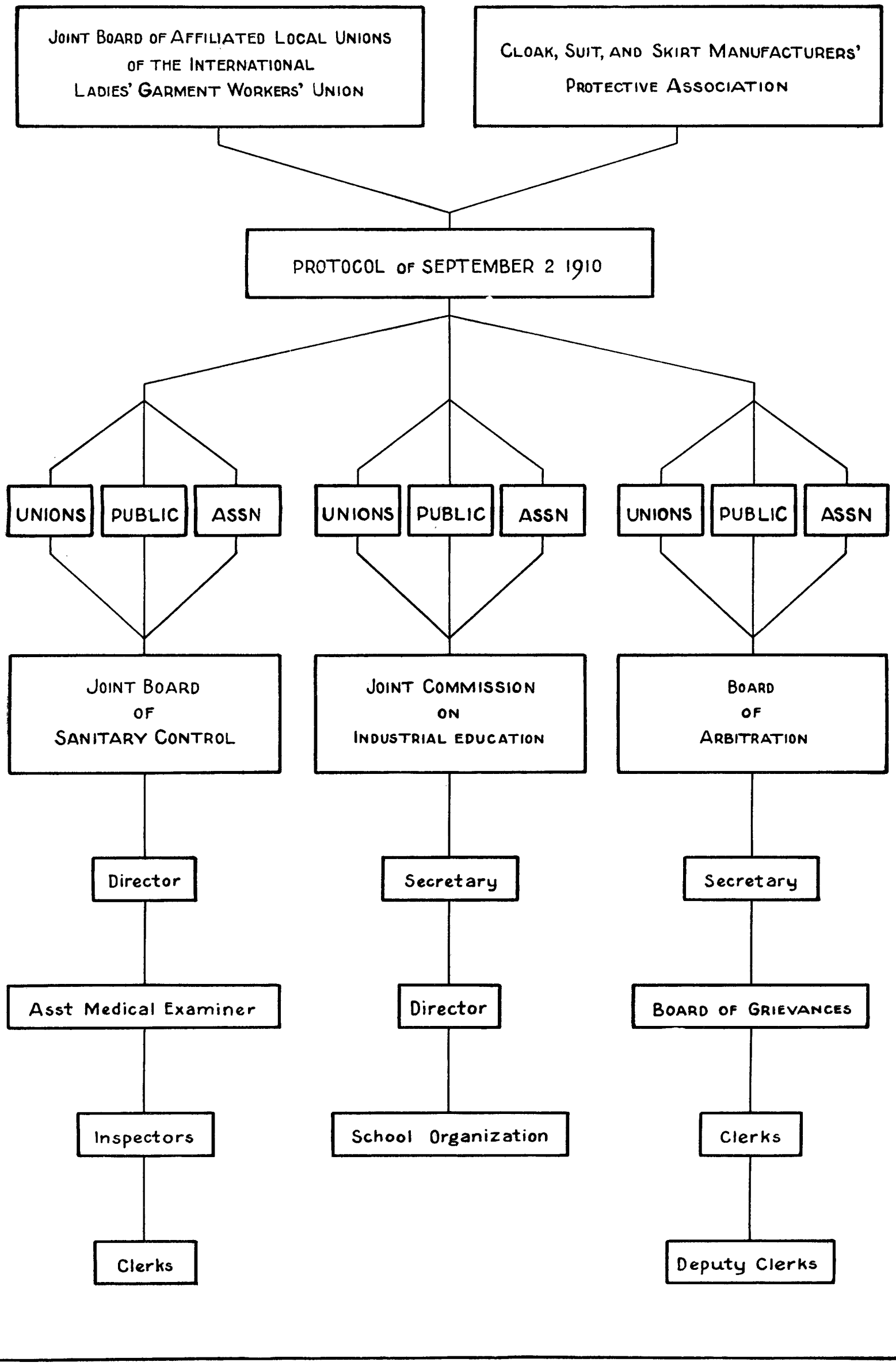
GENERAL SUBJECTS.—The plan here outlined does not contemplate a training confined to wage-earning capacity exclusively. The course of study has been projected under the influence of the conviction that the worker is first of all a man and a citizen, and as such has certain duties, obligations, and privileges of which he must be made aware. The importance of industrial efficiency is not neglected nor minimized, but it is considered in its relation to the whole life of the individual.

For this reason it is insisted that due regard must be paid to general subjects in an educational plan for any industry, in order to insure that minimum of intelligent understanding of civic and social, as well as industrial conditions and tendencies that an enlightened public opinion deems essential to the proper development of our American civilization. In order to provide for this supplementary training it is proposed that one-fourth of the school time shall be devoted to the thoughtful and carefully directed consideration of pertinent topics selected from the fields of industrial history, industrial geography,

ANALYSIS OF TRADE AGREEMENT

CLOAK, SUIT, AND SKIRT INDUSTRY

GREATER NEW YORK



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and industrial and personal hygiene. For many of the workers this kind of study must be preceded, or at least accompanied, by a certain amount of drill in the English language, and a grounding in the elements of mathematics and bookkeeping. The exercises in language work and the problems in mathematics and bookkeeping should be such as naturally arise in the industry, at least until sufficient interest has been aroused to carry the study further.

The importance of the labor organization in this industry, and the fact that the stability of the industry rests in large measure upon the successful direction of the growing tendency to pool interests on both sides, emphasize the necessity for an understanding of the principles of trade agreements and collective bargaining. These topics should have an important place in the curriculum of the industrial school.

Finally, those topics that deal with social and political relationships, and that have to do with appreciation of the spirit and the ideals of American democracy, for convenience comprehended under the inclusive term "citizenship," represent a phase of education that is of special significance in an industry whose workers are to such a large extent foreign born. Not only the future of this industry but the future of the commonwealth is threatened if suitable provision be not made for assisting these thousands of newcomers to adjust themselves to American conditions.

PART-TIME SCHOOL.

COURSE OF STUDY.—Since the plan provides that the apprentice shall spend three hours weekly in school while employed the remainder of the week in a factory, it is not necessary to provide for productive shopwork in the part-time school. One-half of the time is to be devoted to subjects directly related to the factory work, and one-half to general subjects, the general character of these groups of subjects being the same as already described under the factory school. The plan proposes 25 weeks of part-time schooling per year for each apprentice enrolled, but it can be modified quite readily so as to provide a shorter school year or term.

PROGRAM.—The time is to be divided between related subjects and general subjects by dividing each three-hour period into two parts, or by assigning the groups of subjects to alternate weeks.

REGULATION OF FACTORY DEPARTMENT.—It will be necessary for the commission, or for the parties to the agreement in some other way, to reach mutual agreement on rules and regulations governing the operation of the factory department of the school and the disposition of the product. It should be arranged that raw materials needed shall be purchased in the market, or furnished by members of the association on conditions specified. In the same manner,

the product should be sold at market value, or absorbed by members of the association on conditions specified.

RECOMMENDATION OF GRADUATES.—It should be the duty of the director of the school to send to the joint commission on industrial education from time to time the names of apprentices who have successfully completed the various portions of the course of study as outlined, with the recommendation that they be duly examined for certification to the next higher grade.

CERTIFICATION OF APPRENTICES.

Certificates of apprenticeship should be issued by the joint commission on industrial education, through its secretary, rather than by the school in order to invest them with somewhat more of dignity and importance. These documents should be recognized as important and valuable credentials, intrinsically worth striving for. The board, therefore, should have direct charge of the examining of apprentices, classifying them into grades, and issuing apprenticeship certificates.

The secretary of the board should also be charged with devising a follow-up plan, for keeping track of apprentices in the factories, and discovering and removing causes of complaints. It should be his duty to assist the individual apprentice in every way possible in his efforts toward advancement in the industry, and to promote the interests of the worker by advice and suggestion, not only to the worker but to the employer and to the director of the school.

FINANCIAL ORGANIZATION.

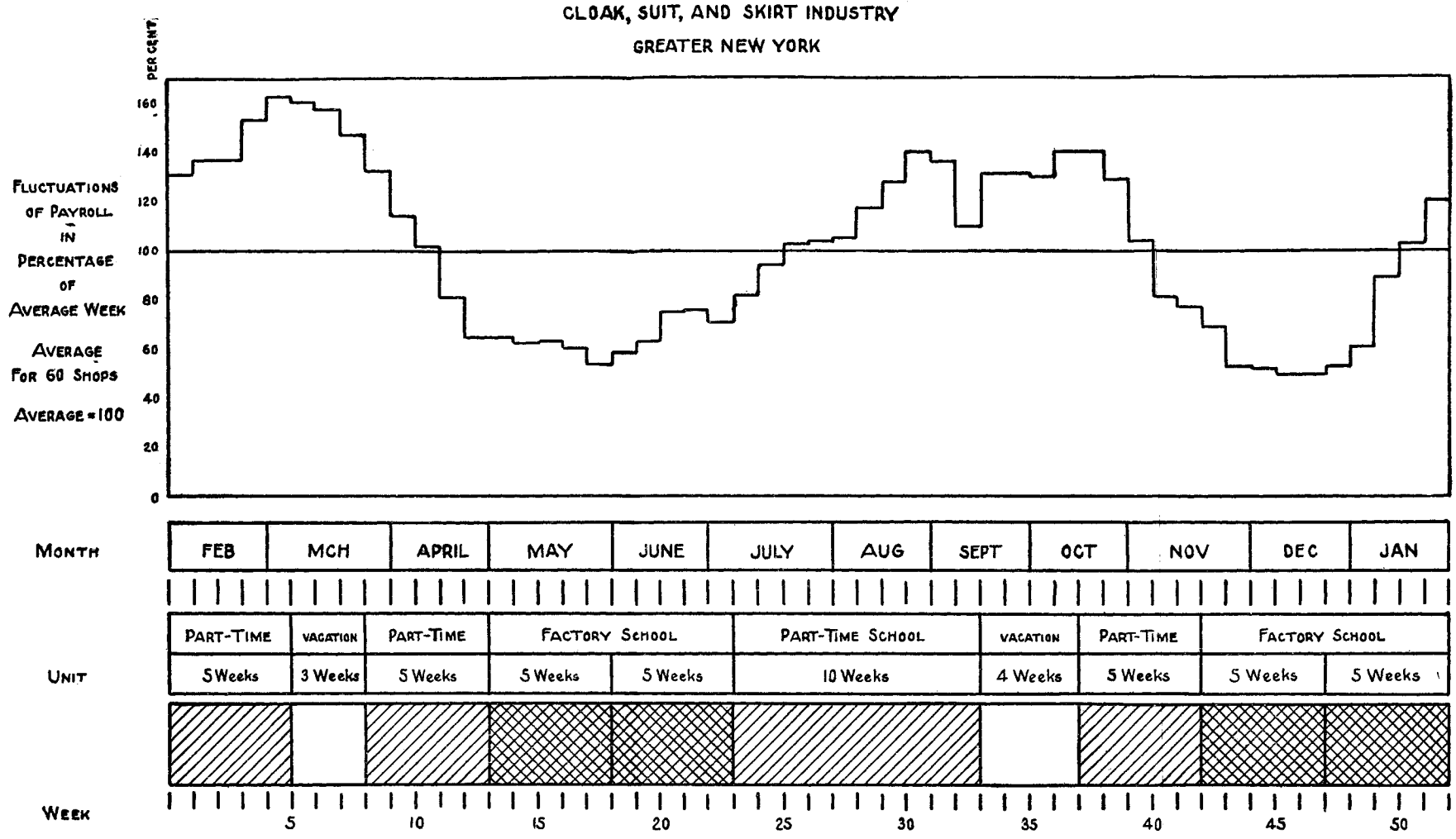
RECEIPTS.—The financial organization of the school is shown in outline in the accompanying diagram. The sources of income may be classified as follows:

1. It is proposed to request the board of education of the city of New York to detail certain teachers to assist in the school. The salaries of such teachers will represent a contribution from this source.
2. Assessments paid by apprentices and employers.
3. It is anticipated that occasions will arise when quantities of material in the form of remnants or otherwise may be available for the use of the school at a considerable reduction from their original value. The difference between the actual value of the goods and the amount paid will constitute a contribution from this source.
4. Whatever is realized from the disposition of the product of the factory department will be credited on the books of the school.
5. Miscellaneous receipts and contributions.
6. Contributions from the unions and the manufacturers' association. Each of the two parties to the agreement is to bear one-half of the net operating expense.

ADJUSTMENT OF INDUSTRIAL SCHOOL TO SEASONAL FLUCTUATIONS

CLOAK, SUIT, AND SKIRT INDUSTRY

GREATER NEW YORK



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EXPENDITURES.—The expenditures will be limited to those necessary for the rental of space, equipment, and operation of the school, and the equipment and maintenance of the office of the board. The receipts will pass to the secretary and will be transmitted by him to the treasurer. Expenditures will be made by the treasurer on vouchers drawn by the secretary and countersigned by the chairman of the board.

BUDGET.—The following budget represents an estimate of the necessary minimum of expenditures for the first year. After the first year the item of $1,250 for equipment will be eliminated. It is impossible to offer anything better than a guess as to the amount that might be realized from the disposition of the product or from miscellaneous contributions.

BUDGET FOR INDUSTRIAL EDUCATION.

Salaries:		
Director	$4,500	
Shop foreman, 20 weeks, at $40	800	
Teacher of industrial subjects, 20 weeks	800	
Teacher of related subjects, 45 weeks	1,800	
Teacher of general subjects, 45 weeks	1,800	
Secretary to the director, 52 weeks, at $25	1,300	
Stenographer and clerk, 52 weeks, at $20	1,040	
		$12,040
Rental:		
Space for factory school, fully equipped, 20 weeks, at $25	500	
Space for part-time school, 25 weeks, at $25	625	
		1,125
Equipment:		
For part-time school—		
Teachers' desks and chairs, Tables for writing and study, for 30, Chairs, for 30, Tables for drafting, for 15, Drafting boards, instruments, etc., Textbooks, lesson sheets, Blackboards, Supplies	750	
For office—		
Desks, chairs, Typewriter, Mimeograph, for duplicating, Filing cabinets	500	
		1,250
Printing:		
Office forms, Record card filing forms, Lesson sheets, Examination questions, Certificates	300	
Incidentals	285	
		585
		15,000

CAPACITY OF SCHOOL.

FACTORY SCHOOL.—The classes should be limited in size to 15 apprentices to each teacher. With the instructional staff as proposed, the program will permit 60 apprentices to be accommodated at one time. The teacher of related subjects and the teacher of general subjects will each have a section of 15 apprentices, while the shop foreman and the teacher of industrial subjects will together have charge of a double section of 30. By an exchange of sections between morning and afternoon sessions each section will be given the three lines of work required.

If each section of apprentices is limited to 5 weeks of instruction, the 20 weeks of factory school will provide accommodations for four sections of 60 each, or 240 apprentices during the year. Of these, it is suggested that 120 be apprentice cutters and 120 apprentice pressers.

If the four units of instruction suggested are planned in such a way as to cover the ground of the first six grades of the apprenticeship plan outlined on page 174, and one of these units offered to the apprentice in each of the first four years of his apprenticeship, it would mean that the factory school, when once in full operation, would have a capacity of 30 graduate apprentice cutters and 30 graduate apprentice pressers each year.

PART-TIME SCHOOL.—The instructional staff for the part-time school includes only the teacher of related subjects and the teacher of general subjects, in addition to the director. Since each apprentice is to receive only one-half day (three hours) of instruction, each teacher can accommodate two sections of 15 each daily, or, together, 60 per day. In a week of 5½ days, therefore, provision is made for 330 apprentices. Of these, it is suggested that 150 be apprentice cutters, 150 apprentice pressers, and that special sections be provided for 30 girls employed as finishers, cleaners, basters, etc.

If the term of 25 weeks be considered as a unit, and one such unit be offered for each of the 5 years of the apprenticeship, the part-time school, when in full operation, will have a capacity of 30 graduate apprentice cutters and 30 graduate apprentice pressers each year.

The following summary shows the number of hours of instruction provided in the proposed units.

SUMMARY OF HOURS OF INSTRUCTION.

Subjects.	Hours of instruction in—	
	5 weeks' course in factory school.	25 weeks' course in part-time school.
Industrial subjects	82½	(Work in factory.)
Related subjects	41¼	37½
General subjects	41¼	37½

Whether the amount of time allowed is enough to accomplish all that may be desired, or whether the two parts of the plan (the factory school and the part-time school) can be made of substantially equal value to apprentices, are questions that can be answered satisfactorily only after a careful trial has been made and the results studied. It may be found desirable, for example, to employ the teacher of industrial subjects during the 25 weeks of the part-time school, and to arrange for him a schedule of visits to the factories where apprentices are employed, in order to systematize the instruction in the industrial processes.

APPRENTICESHIP PLAN FOR PRESSERS.—In explanation, it should be said at this point that the plan contemplates the formulation of an apprenticeship system for pressers correlative to that outlined on pages 174 to 176 for cutters.

The following schedule indicate the arrangement of hours of instruction and the classes assigned to each teacher for the factory school and the part-time school, respectively. Each section, A, B, C, D, etc., is understood to consist of not more than 15 apprentices.

TEACHERS' SCHEDULES.

FACTORY SCHOOL.

Hours.	Staff.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9 to 12	Shop foreman	A	A	A	A	A	A
	Teacher of industrial subjects	B	B	B	B	B	B
	Teacher of related subjects	C	D	C	D	C	D
	Teacher of general subjects	D	C	D	C	D	C
1 to 4	Shop foreman	C	C	C	C	C	.....
	Teacher of industrial subjects	D	D	D	D	D	.....
	Teacher of related subjects	A	B	A	B	A	.....
	Teacher of general subjects	B	A	B	A	B	.....

PART-TIME SCHOOL.

9 to 12	Teacher of related subjects	A	E	I	M	Q	U
	Teacher of general subjects	B	F	J	N	R	V
1 to 4	Teacher of related subjects	C	G	K	O	S	.....
	Teacher of general subjects	D	H	L	P	T	.....

The following table shows the numbers of apprentices, by grades, for which accommodations will be provided when the industrial school is in full operation.

NUMBERS OF APPRENTICES PROVIDED FOR AND GRADES REPRESENTED.

Grades.	Factory school.		Part-time school.		
	Cutters.	Pressers.	Cutters.	Pressers.	Special.
1, 2, 3	45	45	60	60	.....
4	30	30	45	45	.....
5	15	15	15	15	.....
6	15	15	15	15	.....
7	15	15	15	15	.....
Special class for finishers, etc. (girls)	.....	.....	.....	.....	30
Total	120	120	150	150	30

PER CAPITA COSTS.

Without taking into account the probable reduction in the cost of running the industrial school through the various sources of income already enumerated, a budget of $15,000 for 45 weeks gives a weekly estimated expense of $333.33. Since the factory school accommodates 60 apprentices, the weekly cost per apprentice is $5.55; and for the unit of 5 weeks the cost for instruction is $27.75 for each apprentice enrolled.

The part-time school accommodates 330 apprentices, consequently the weekly cost per apprentice is $1.01; and since each apprentice is to receive 25 weeks of instruction, the cost is $25.25 for each apprentice enrolled.

ASSESSMENTS.—The apprenticeship agreement proposes that each employer shall pay into the treasury of the commission on industrial education a weekly assessment for each apprentice during the period of instruction in the industrial school and that each apprentice shall pay a weekly assessment while employed in any factory. Both the employer and the apprentice will be directly benefited by the work of the industrial school and therefore should contribute something toward its maintenance. Each is more likely to assume an attitude of interest and helpful cooperation toward an enterprise to the support of which he is making some financial contribution, however small.

RELATION OF THE INDUSTRIAL SCHOOL TO THE PROTOCOL.

The accompanying diagram shows in outline the relation of the proposed industrial school and the joint commission on industrial education to the protocol, which was signed September 2, 1910. The parties to the agreement are: The joint board of affiliated local unions of the International Ladies' Garment Workers' Union, and the Cloak, Suit, and Skirt Manufacturers' Protective Association.

Under the terms of the protocol there have been set up two agencies dealing with specific classes of industrial problems:

1. The joint board of sanitary control, consisting of "two nominees of the manufacturers, two nominees of the unions, and three who are to represent the public." The organization of the board includes a director, an assistant medical examiner, a staff of inspectors, and clerks.

2. The board of arbitration, consisting of "one nominee of the manufacturers, one nominee of the unions, and one representative of the public." The organization provides for a secretary, a board of grievances, clerks of the board of grievances, and deputy clerks.

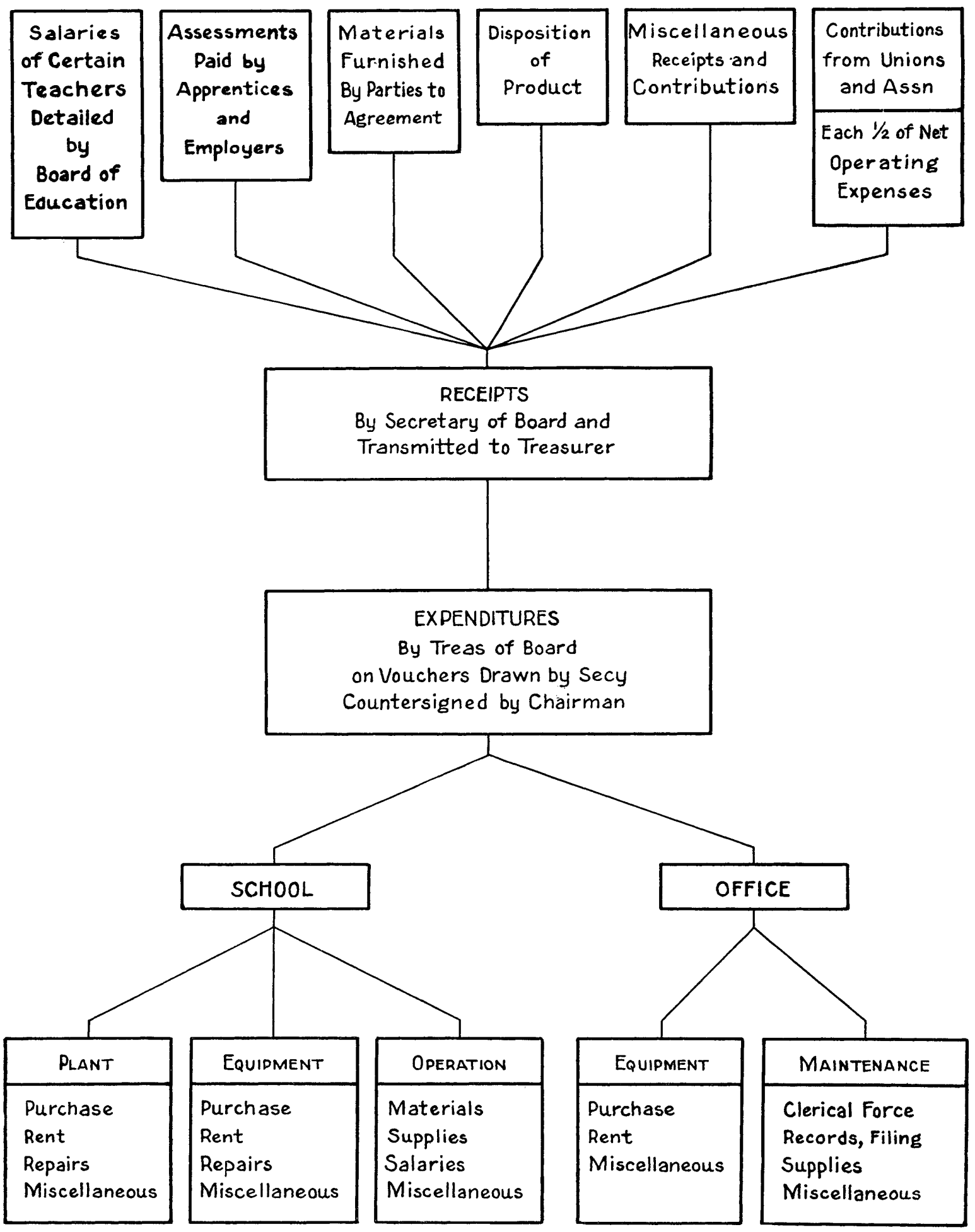
It is now proposed to adopt an amendment to the protocol which shall provide for the establishment of a third agency correlative with the ones just mentioned:

3. The joint commission on industrial education, consisting of three nominees of the manufacturers, three nominees of the unions, and three representatives of the public, at least one of whom shall be a member of the board of education of Greater New York and one an expert in industrial education. The organization of the commission provides for a secretary, to have charge of finance and the certification of apprentices, and a director, who is to be responsible for the management of the industrial school and the factory department.

FINANCIAL ORGANIZATION

INDUSTRIAL SCHOOL IN THE CLOAK, SUIT, AND SKIRT INDUSTRY

GREATER NEW YORK



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