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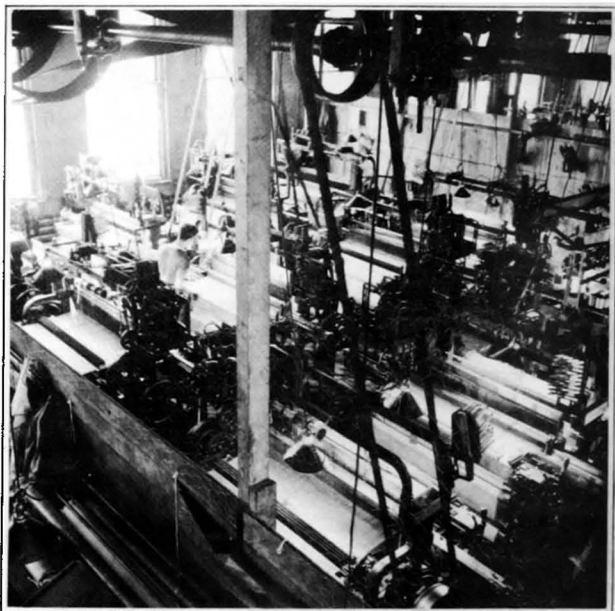
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**Reemployment Opportunities and Recent Changes
in Industrial Techniques**

DAVID WEINTRAUB

Director

Studies of the Effects of Industrial Change on Labor Markets



WPA - National Research Project (Silk)

A PATERSON BROAD-SILK SHOP

This shop, like many others in Paterson, is located in an old mill building and is separated from other petty shops by boarding and chicken wire.

**EMPLOYMENT EXPERIENCE
OF PATERSON BROAD-SILK WORKERS, 1926-36**

*A Study of Intermittency of Employment
in a Declining Industry*

by

James E. Wood

WORKS PROGRESS ADMINISTRATION, NATIONAL RESEARCH PROJECT

Report No. L-3

Philadelphia, Pennsylvania

May 1939

**THE WPA NATIONAL RESEARCH PROJECT
ON REEMPLOYMENT OPPORTUNITIES AND RECENT CHANGES
IN INDUSTRIAL TECHNIQUES**

Under the authority granted by the President in the Executive Order which created the Works Progress Administration, Administrator *Harry L. Hopkins* authorized the establishment of a research program for the purpose of collecting and analyzing data bearing on problems of employment, unemployment, and relief. Accordingly, the National Research Program was established in October 1935 under the supervision of *Corrington Gill*, Assistant Administrator of the WPA, who appointed the directors of the individual studies or projects.

The Project on Reemployment Opportunities and Recent Changes in Industrial Techniques was organized in December 1935 to inquire, with the cooperation of industry, labor, and governmental and private agencies, into the extent of recent changes in industrial techniques and to evaluate the effects of these changes on the volume of employment and unemployment. *David Weintraub* and *Irving Kaplan*, members of the research staff of the Division of Research, Statistics, and Finance, were appointed, respectively, Director and Associate Director of the Project. The task set for them was to assemble and organize the existing data which bear on the problem and to augment these data by field surveys and analyses.

To this end, many governmental agencies which are the collectors and repositories of pertinent information were invited to cooperate. The cooperating agencies of the United States Government include the Department of Agriculture, the Bureau of Mines of the Department of the Interior, the Bureau of Labor Statistics of the Department of Labor, the Railroad Retirement Board, the Social Security Board, the Bureau of Internal Revenue of the Department of the Treasury, the Department of Commerce, the Federal Trade Commission, and the Tariff Commission.

The following private agencies joined with the National Research Project in conducting special studies: the Industrial Research Department of the University of Pennsylvania, the National Bureau of Economic Research, Inc., the Employment Stabilization Research Institute of the University of Minnesota, and the Agricultural Economics Departments in the Agricultural Experiment Stations of California, Illinois, Iowa, and New York.

WORKS PROGRESS ADMINISTRATION

WALKER-JOHNSON BUILDING
1734 NEW YORK AVENUE NW.
WASHINGTON, D. C.

F. C. HARRINGTON
ADMINISTRATOR

May 19, 1939

Colonel F. C. Harrington
Works Progress Administrator

Sir:

Unemployment is not a simple problem which can be explained by reference to one or a few general causes. The sources of unemployment are many, and the problems faced by an agency charged with the responsibility of meeting them are varied in nature. Thus, there are the problems of the jobless youth, of the unemployed older worker, of the wage earner in a stranded community, and of the worker displaced by machinery. All of these, and other unemployment problems, grow out of special combinations of causes, and all of them require special remedial action.

The report transmitted herewith deals with the recent employment experience of broad-silk workers in Paterson, New Jersey. It shows how these workers were affected by circumstances allied with their industry and with related industries. The report demonstrates that general business conditions are only a partial explanation of changes in unemployment. The demand for the labor of the silk workers in Paterson, the length of time they held their jobs, and the frequency with which they became unemployed were dependent on special factors in their industry. These special factors included the competition of rayon, the migration of plants to other areas, the increased specialization of demand on the Paterson silk market, and the increased control of silk production by commission men and converters.

The findings of the present report can be summarized as follows: In November 1936, the busiest period of the year for the industry, one worker in four was unemployed. One worker in six had had no job at all during the year 1936. In general, the Paterson broad-silk workers were an older group. They had been in the industry all or the greater part of their

working lives. Despite the heavy unemployment in the years from 1926 to 1936, few had left the industry to look for work elsewhere. These workers could be considered, in part at least, a stranded group, because employment opportunities for them were scarce and intermittent and because their average age made transfer to other occupations very difficult.

The background of the heavy unemployment and the irregular employment among the silk workers of Paterson was an industry made up largely of small-sized establishments with a low level of production and with intermittent operation.

The unemployed silk workers of Paterson represent a group for whom the present public-welfare system appears inadequate. Most of them fall into the class of "older workers", and because there is little chance that job opportunities will improve, there is little that they can do to build up old-age benefits under the Social Security Act. Unemployment compensation can help these workers little, because their jobs are too intermittent. If old-age-benefit and unemployment-compensation laws remain unchanged, there will continue to be a need for other forms of relief for Paterson broad-silk workers.

Respectfully yours,

A handwritten signature in cursive script that reads "Corrington Gill". The signature is written in black ink and is positioned above the typed name.

Corrington Gill
Assistant Administrator

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PREFACE

The high levels of unemployment which have prevailed since 1930 are justifiably centering attention on the causes and incidence of the type of unemployment that results from the complete separation of a worker from his job. It is, of course, this type rather than that resulting from short-term lay-offs that most rapidly leads to destitution and the need for governmental relief and other ameliorative measures. There is, however, another large though mainly unmeasured volume of unemployment that represents the cumulated workless periods due to frequent temporary lay-offs. The amount of such "unemployment within employment" that workers suffer while remaining associated with particular jobs or while moving from job to job reflects, in part, the effects of management policy designed to maintain a reserve of labor attached to the plant or industry and, in part, the fluctuations in production that characterize the plant or industry.

These patterns of employment and unemployment differ from industry to industry. For example, this Project's study of 10-year work histories of machinists, millwrights, and tool makers in Philadelphia¹ showed that during the period 1926-36 half the men had experienced no work interruptions that lasted as long as a month. On analysis, it was found that there were no significant differences in personal characteristics between the men who had and those who did not have any unemployment. There were, however, clear-cut differences between the two groups as to the industries to which the men customarily looked for employment.

Sometimes the fluctuations in production and employment mirror the seasonality with which the raw materials become available, as, for instance, in industries that process perishable agricultural products; sometimes the seasonal ups and downs represent the responses to fluctuations in consumers' demand, as in the case of certain types of clothing manufacture; then again, a method of handling a labor force prevails in a plant or industry because it is believed to provide management with a flexibility that reduces its own burden of costs owing to intermittency of operations (at least part of such costs are

¹Helen Herrmann, *Ten Years of Work Experience of Philadelphia Machinists* (WPA National Research Project in cooperation with Industrial Research Department, University of Pennsylvania, Report No. P-6, Sept. 1939).

then borne by the work force in the form of interruptions of work and income); the fluctuations may also reflect the effects of technological changes in an industry or in one producing a competing product, the migration of an industry, to other areas, or the exhaustion of a natural resource.

There are many examples of plants and industries that have succeeded in changing their patterns of employment when for one reason or another a change seemed desirable or unavoidable. Moving the date of the annual automobile show and thereby shifting the lull in production from winter to summer on an industry-wide basis is probably the most important recent instance. Other plants or industries obtained relative stability of employment by concentrating on the production of a product with a stable demand or by diversifying their products in such a fashion that the seasonality of their demand dovetailed over the year. Still another effort at the stabilization of employment and earnings was described in this Project's report on *Decasualization of Longshore Work in San Francisco*.² In this case the occupation and the industry involved were regarded as traditionally incapable of stabilization; yet the plan in operation in San Francisco seems to be succeeding.

Always, the form in which production is organized affects the stability of employment and the worker's security on the job. Conversely, the installation of measures designed to reduce intermittency of work and to provide security nearly always calls for improved controls over the flow of production and requires attention to plans and forms of organization that will yield the desired objectives. The men's and women's clothing industries used to be classic examples of chaotic conditions of production that had their counterpart in intermittent employment of "sweated" labor whose job tenure was largely casual. It was not until trade-unionism forced attention to the need for a measure of stability that collective bargaining brought order in the production and employment structure of these industries, involving the organization of jobbers, manufacturers, contractors, and subcontractors and the fixing of a hierarchy of responsibilities and controls over wages and methods of distribution of work.

For reasons that differ from those that prevailed in the needle trades 30 years ago, the production methods that obtain in the Paterson broad-silk industry today have similar effects

²By Marvel Keller (WPA National Research Project, Report No. L-2, Apr. 1939).

on the workers who look to it for a livelihood. The present report's account of the employment experiences of broad-silk worker in Paterson presents a picture of an industry which in that city (1) has been declining for over a decade owing to severe competition from outside areas and to a technological change which resulted in a new and competitive product, rayon; (2) has, in the process of adjustment to the shrinking demand, gone through a transformation that involved the growth of commission operation, production and financial control by converters and factors, high rate of opening and closing of plants and migration to other localities, and a decline in the size of plants; and (3) has forced its workers to compete in a glutted labor market for casual jobs at declining wages or even to purchase a few old looms in the hope that they would thereby acquire a somewhat sheltered position in their fight for work.

The insecurity of the Paterson silk workers is perhaps best illustrated by the fact that when, in the attempt to obtain their work histories, the interviewers engaged on this study tried to use a schedule that defined a job as "work with one employer lasting at least 1 month" - a definition that was used successfully in other labor markets - they found the schedule impractical for a significant number of workers because they had changed their employment status literally dozens of times in the span of a few years. The principal factors responsible for these rapid changes are: That whatever demand there may be for broad-silk manufacturing in Paterson consists, to a considerable extent, of small orders which by their nature can provide employment for only short periods; and that the existing demand is not directed through channels that are controlled in the interest of stability of production and employment but, rather, is diffused through numerous converters and commission merchants to reach a market which, at the manufacturing stage, is characterized by overcapacity, obsolescence of equipment, inability to plan production because of the absence of control over production, and a desperate competition for orders to cover at least part of the costs.

That under these circumstances the workers in this once great silk center should be subject to widespread unemployment of extended duration is of course to be expected in the absence of alternative employment opportunities. In a sample of 578 workers whose usual industry was broad silk, 30.8 percent had no employment in the industry in the first 11 months of 1936.

In part, at least, the labor supply of the broad-silk industry in Paterson must be regarded as stranded; but whether the intermittency of work for those whose labor is still needed in the industry is to be regarded as a necessary consequence of the industry's decline is, in the light of the experience of other labor markets, open to serious question.

This study was made on the basis of plans outlined by Irving Kaplan in his capacity of Associate Director of this Project. The field work was done under the administrative supervision of H. Paul Douglass who was in general charge of the field work on all labor-market studies outside of Philadelphia. The immediate direction of the field work was shared by G. Richard Ohmes and James E. Wood, who also analyzed the data and wrote the report. The completed manuscript was edited and prepared for publication under the supervision of Edmund J. Stone.

A number of organizations and individuals have contributed materials, and our indebtedness is herewith gratefully acknowledged to Abraham Brenman, counsel for the Silk Commission Manufacturers' Association, for giving generously of his time to review the situation in Paterson; to Irving Abramson, assistant regional director of the Textile Workers Organizing Committee of the Congress of Industrial Organizations, and his staff, for material and numerous interviews; to Herbert S. Swan, consultant of the Paterson Industrial Commission, for aid in obtaining information on the broad-silk industry in Paterson in 1936; to David L. Cole, counsel for the Silk and Rayon Manufacturers' Association; John J. Fitzgerald, secretary of the Paterson Chamber of Commerce; Irene L. Blunt, secretary of the National Federation of Textiles, Incorporated, New York City, for help in obtaining information; to the Crompton and Knowles Loom Works, for data on sales of looms in New Jersey; to the Davison Publishing Company, for use of corrected proofs of the 1937 issue of *Rayon and Silk Trades*; and to the various silk manufacturers who permitted their records to be used and to silk workers who gave their time to answering the questions of the interviewers.

The way in which the materials were used and the conclusions drawn are, of course, entirely the responsibility of the National Research Project.

DAVID WEINTRAUB

PHILADELPHIA

May 16, 1939

APPENDIX

PATERSON BROAD-SILK WORKERS

Table A-1.- NUMBER OF SHOPS AND LOOMS, BY SIZE OF SHOP, 1924-36^a

Item	Total	Total reporting		Size of shop (loomage)								Not ascertainable ^b
				1-20		21-50		51-100		Over 100		
		Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	
Shops												
1924	518	515	100.0	244	47.3	210	40.8	39	7.6	22	4.3	3
1925	596	593	100.0	299	50.4	237	40.0	34	5.7	23	3.9	3
1926	687	661	100.0	312	47.2	284	43.0	36	5.7	27	4.1	26
1927	644	640	100.0	284	44.4	287	44.8	45	7.0	24	3.8	4
1928	557	551	100.0	222	40.3	267	48.5	37	6.7	25	4.5	6
1929	517	514	100.0	205	39.9	253	49.2	35	6.8	21	4.1	3
1930	516	512	100.0	220	43.0	236	46.1	34	6.6	22	4.3	4
1931	478	475	100.0	201	42.3	229	48.2	28	5.9	17	3.6	3
1932	477	476	100.0	212	44.5	218	45.8	31	6.5	15	3.2	1
1933	455	455	100.0	197	43.3	216	47.5	30	6.6	12	2.6	0
1934	475	474	100.0	236	49.8	194	40.9	30	6.3	14	3.0	1
1935	480	479	100.0	251	52.4	190	39.7	27	5.6	11	2.3	1
1936	390	389	100.0	203	52.2	155	39.8	21	5.4	10	2.6	1
Looms (thousands)^c												
1924		19.7	100.0	3.0	16.0	7.7	41.2	3.1	16.6	4.9	26.2	
1925		20.2	100.0	3.7	18.3	8.7	43.1	2.7	13.4	5.1	25.2	
1926		22.2	100.0	3.6	16.2	10.2	46.0	3.2	14.4	5.2	23.4	
1927		21.7	100.0	3.4	15.7	10.6	48.8	3.6	16.6	4.1	18.9	
1928		19.5	100.0	2.6	13.3	9.9	50.8	2.9	14.9	4.1	21.0	
1929		18.1	100.0	2.4	13.3	9.4	51.9	2.8	15.5	3.5	19.3	
1930		16.9	100.0	2.5	14.8	8.1	47.9	2.7	16.0	3.6	21.3	
1931		15.7	100.0	2.4	15.3	8.5	54.1	2.2	14.0	2.6	16.6	
1932		14.9	100.0	2.5	16.8	7.6	52.3	2.4	16.1	2.2	14.8	
1933		14.4	100.0	2.3	16.0	7.9	54.8	2.4	16.7	1.6	12.5	
1934		14.0	100.0	2.5	17.9	7.0	50.0	2.4	17.1	2.1	15.0	
1935		13.5	100.0	3.0	22.2	6.8	50.4	2.1	15.6	1.6	11.8	
1936		11.1	100.0	2.4	21.6	5.6	50.5	1.6	14.4	1.5	13.5	

^a Data compiled from yearly listings in Davison's *Rayon and Silk Trades*.^b Represents shops with two or more general types of looms (e. g., Jacquard or ribbon as well as broad silk) in which the number of broad-silk looms was not ascertainable.^c Excludes looms in shops whose broad-silk loomage was not ascertainable.

Table A-3.- NUMBER OF SHOPS AND LOOMS, BY TYPE OF OPERATION, 1924-36^a

Item	Total		Commission		Independent		Both commission and independent plus not specified	
	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
Shops								
1924	518	100.0	121	23.4	359	69.3	38	7.3
1925	598	100.0	198	33.2	376	63.1	22	3.7
1926	687	100.0	209	30.4	405	59.0	73	10.6
1927	844	100.0	215	25.4	369	43.7	260	30.9
1928	557	100.0	209	37.5	318	57.1	30	5.4
1929	517	100.0	201	38.9	278	53.8	38	7.3
1930	516	100.0	247	47.9	156	30.6	111	21.5
1931	478	100.0	235	49.2	148	30.5	97	20.3
1932	477	100.0	249	51.0	126	26.4	108	22.6
1933	455	100.0	242	53.2	124	27.2	89	19.6
1934	475	100.0	260	54.7	144	30.3	71	15.0
1935	480	100.0	285	59.4	119	24.8	76	15.8
1936	390	100.0	224	57.4	99	25.4	67	17.2
Looms (thousands)^b								
1924	18.7	100.0	2.0	10.7	14.9	79.7	1.8	9.6
1925	20.2	100.0	3.1	15.3	16.3	80.7	0.8	4.0
1926	22.2	100.0	3.7	16.7	17.2	77.5	1.3	5.8
1927	21.7	100.0	4.2	19.4	15.8	72.8	1.7	7.8
1928	19.5	100.0	4.2	21.5	14.6	74.9	0.7	3.6
1929	18.1	100.0	4.3	23.8	12.7	70.2	1.1	6.0
1930	16.9	100.0	5.4	32.0	8.0	47.3	3.3	20.7
1931	15.7	100.0	5.4	34.4	7.0	44.6	3.3	21.0
1932	14.9	100.0	5.6	37.6	5.9	39.6	3.4	22.8
1933	14.4	100.0	5.7	39.6	5.7	39.6	3.0	20.8
1934	14.0	100.0	5.8	40.0	6.1	43.6	2.3	16.4
1935	13.5	100.0	6.1	45.2	5.0	37.0	2.4	17.8
1936	11.1	100.0	5.0	45.1	4.3	38.7	1.8	16.2

^aData compiled from yearly listings in Davison's *Rayon and Silk Trades*.^bExcludes looms in shops whose broad-silk loomage was not ascertainable.

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Table A-3.- NUMBER OF MIGRATING SHOPS AND THEIR AGGREGATE LOOMAGE, BY TYPE OF OPERATION, 1925-36^a

Year	Total		Commission		Independent		Both commission and independent plus not specified	
	Shops	Looms	Shops	Looms	Shops	Looms	Shops	Looms
Total	56	4,821	11	398	37	3,817	8	606
1925	11	840	3	66	5	428	3	346
1926	2	74	1	20	0	0	1	54
1927	3	657	1	32	2	625	0	0
1928	7	619	0	0	7	619	0	0
1929	11 ^b	950 ^b	1	44	10	906	0	0
1930	2	218	0	0	2	218	0	0
1931	5 ^c	382 ^c	1	60	4	322	0	0
1932	2	237	0	0	2	237	0	0
1933	3	174	1	40	2	134	0	0
1934	2	84	1	40	0	0	1	44
1935	7	562	2	96	2	304	3	162
1936	1	24	0	0	1	24	0	0

^aData compiled from yearly listings in *Davison's Rayon and Silk Trades*.

^bIncludes one shop that moved 220 looms and left 80 in Paterson. Only 220 were counted for this shop.

^cIncludes one shop whose Paterson loomage is unknown.

Table A-4.- AVERAGE NUMBER OF LOOMS PER SHOP, BY SIZE OF SHOP, 1924-36^a

Year	Total ^b	Size of shop (loomage)			
		1-20	21-60	61-100	Over 100
1924	36.3	12.3	36.7	78.5	222.7
1925	34.1	12.4	36.7	79.4	221.7
1926	33.6	11.5	35.9	84.2	192.6
1927	33.9	12.0	36.9	80.0	170.8
1928	35.4	11.7	37.1	78.4	164.0
1929	35.2	11.7	37.2	80.0	166.7
1930	33.0	11.4	34.3	79.4	163.6
1931	33.1	11.9	37.1	78.6	152.9
1932	31.3	11.6	35.8	77.4	146.7
1933	31.6	11.7	36.6	80.0	150.0
1934	29.5	10.6	36.1	80.0	150.0
1935	26.2	12.0	35.8	77.8	145.5
1936	26.5	11.8	36.1	76.2	150.0

^aData compiled from yearly listings in *Davison's Rayon and Silk Trades*.

^bExcludes looms in shops whose broad-silk loomage was not ascertainable.

Table A-5.- DISTRIBUTION OF 100 SMALL SHOPS IN 1926,
BY TYPE OF OPERATION, 1926-36^a

Year	Total		Commission		Independent		Both commission and independent	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1926	53	100.0	24	45.3	25	47.2	4	7.5
1927	54	100.0	24	44.4	25	46.3	5	9.3
1928	57	100.0	28	49.1	25	43.9	4	7.0
1929	57	100.0	27	47.4	24	42.1	6	10.5
1930	56	100.0	27	48.2	23	41.1	6	10.7
1931	65	100.0	37	56.9	24	36.9	4	6.2
1932	68	100.0	42	61.8	22	32.3	4	5.9
1933	74	100.0	47	63.5	23	31.1	4	5.4
1934	82	100.0	56	68.3	19	23.2	7	8.5
1935	95	100.0	70	73.7	19	20.0	6	6.3
1936	100	100.0	74	74.0	17	17.0	9	9.0

^aData obtained in NRP Field Survey: schedule for shops having 20 looms or less which were in business at any time during the year.

Table A-6.- AVERAGE NUMBER OF LOOMS PER SHOP,
BY TYPE OF OPERATION, 1924-36^a

Year	Total ^b	Commission	Independent	Both commission and independent plus not specified
1924	36.3	16.5	41.5	51.4
1925	34.1	15.7	43.4	42.1
1926	33.6	17.7	42.5	27.7
1927	33.9	19.5	42.6	30.4
1928	35.4	20.7	45.9	23.3
1929	35.2	21.4	45.7	31.4
1930	33.0	21.9	50.6	32.7
1931	33.1	23.0	47.9	35.1
1932	31.3	23.0	46.8	31.8
1933	31.6	23.6	46.0	33.7
1934	29.5	21.5	42.4	32.9
1935	28.2	21.4	42.0	32.0
1936	28.5	22.3	43.4	27.3

^aData compiled from yearly listings in *Devilon's Rayon and Silk Trades*.

^bAverages computed only for those shops reporting broad-silk looms.

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Table A-7.- PRODUCTION OF TOTAL BROAD GOODS IN THE UNITED STATES AND NEW JERSEY, 1899-1933^a

Year and State	Total broad goods ^b			All-silk broad goods ^b		
	Square yards (thousands)	Percent	Percentage change over preceding census year	Square yards (thousands)	Percent	Percent of total broad goods
1899						
United States	87,637	100.0	-	66,437	100.0	76.1
New Jersey	40,594	46.3	-	35,415	53.2	89.7
All other States	47,043	53.7	-	32,022	46.8	68.1
1904						
United States	124,871	100.0	+42.5	97,871	100.0	78.4
New Jersey	46,701	37.4	+15.0	42,327	43.2	90.6
All other States	78,170	62.6	+55.2	55,544	56.8	71.1
1909						
United States	188,707	100.0	+48.7	114,877	100.0	61.9
New Jersey	64,788	34.9	+38.7	52,408	45.6	80.9
All other States	120,919	65.1	+54.7	62,474	54.4	51.7
1914						
United States	216,034	100.0	+16.3	142,713	100.0	66.1
New Jersey	69,163	32.0	+ 6.8	52,049	36.5	75.3
All other States	146,871	68.0	+21.5	90,664	63.5	61.7
1919						
United States	310,132	100.0	+43.6	245,661	100.0	79.3
New Jersey	108,548	35.0	+56.9	99,483	40.5	91.5
All other States	201,584	65.0	+37.3	146,378	59.5	72.6
1921						
United States	278,411	100.0	-10.2	230,903	100.0	82.9
New Jersey	81,559	29.3	-24.9	74,333	32.2	91.1
All other States	196,852	70.7	- 2.3	156,570	67.8	79.5
1923						
United States	376,222	100.0	+35.1	271,620	100.0	72.2
New Jersey	103,849	27.6	+27.3	84,561	31.1	81.4
All other States	272,373	72.4	+38.4	187,259	68.9	68.8
1925						
United States	468,116	100.0	+28.4	384,725	100.0	79.5
New Jersey	124,699	25.6	+20.0	106,269	28.1	86.9
All other States	343,477	74.2	+31.6	278,456	71.9	77.1
1927						
United States	512,627	100.0	+ 8.1	385,530	100.0	75.2
New Jersey	126,643	24.7	+ 1.6	99,810	25.9	78.8
All other States	386,184	75.3	+ 7.7	285,720	74.1	74.0
1929						
United States	597,114	100.0	+16.4	484,807	100.0	71.1
New Jersey	108,856	18.2	-14.0	85,708	20.2	78.7
All other States	488,258	81.8	+28.4	399,099	79.8	69.4
1931						
United States	666,664	100.0	- 5.1	386,294	100.0	68.1
New Jersey	88,660	15.7	-16.3	74,264	19.2	83.5
All other States	477,884	84.3	- 2.1	312,030	80.8	65.3
1933						
United States	558,661	100.0	- 1.4	301,436	100.0	56.0
New Jersey	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
All other States	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

^aData were secured from the following volumes of the U. S. Department of Commerce, Bureau of the Census: data for 1899-1909, from *Thirty-Seventh Census of the United States: 1910*, Vol. X, "Manufactures: 1909" (1913), p. 185; for 1914-21, from *Biennial Census of Manufactures: 1921* (1924), p. 243; for 1923-27, from same for 1927 (1930), pp. 335-7; for 1929 from *Biennial Census of the United States: 1930*, "Manufactures: 1929" (1933), vol. II, p. 330; and for 1931-33, from *Statistical Census of Manufactures: 1933* (1935), p. 175.

^bExcludes pile fabrics; includes flat Jacquards.

n.s. Data not available.

Table A-8.- NATIVITY AND SEX OF WORKERS IN SILK MILLS, 1890-1930^a

Nativity	1890			1900			1910			1920			1930		
	Total ^b	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total	12,371	6,340	6,031	12,602	6,536	6,066	16,030	8,318	7,712	19,435	10,022	9,413	11,545	6,646	4,899
Native white	5,880	2,240	3,340	6,238	2,534	3,704	7,987	2,975	5,012	9,937	3,820	6,117	5,690	2,395	3,295
Native parentage	1,459	624	835	1,525	646	879	2,039	770	1,269	2,691	1,027	1,664	n. a.	n. a.	n. a.
Foreign parentage ^c	4,121	1,616	2,505	4,713	1,888	2,825	5,948	2,205	3,743	7,246	2,793	4,453	n. a.	n. a.	n. a.
Foreign white	6,788	4,098	2,690	6,364	4,002	2,362	8,039	5,342	2,697	9,488	6,197	3,291	5,829	4,247	1,582
Negro	3	2	1	0	0	0	4	1	3	10	5	5	26	4	22

^aData for 1890 were secured from *Eleventh Census of the United States: 1890, "Population"* (U. S. Dept. Int., Census Office, 1897), part II, pp. 708-9; for 1900, from *Fifth Census of the United States: 1900, "Special Report on Occupations"* (U. S. Dept. Com. and Labor, Bur. Census, 1904), pp. 666-9. Data for the remaining years were secured from the following volumes of the U. S. Department of Commerce, Bureau of the Census: data for 1910, from *Thirteenth Census of the United States: 1910, "Population"* (1914), vol. IV,

D. 687; for 1920, from *Fourteenth Census of the United States: 1920, "Population"* (1923), vol. IV, pp. 1191-2; for 1930, from *Fifteenth Census of the United States: 1930, "Population"* (1933), vol. IV, p. 1039.

^bFigures for 1890 are for cotton, woolen, and other textile mill operatives.

^cEither one or both parents are foreign-born.

n. a. Data not available.

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Table A-9.- NATIVITY, BY SEX AND AGE OF WORKERS, 1938^a

Sex and age in years	Total		Native-born		Foreign-born	
	Number	Percent	Number	Percent	Number	Percent
Total workers	618	100.0	209	100.0	407	100.0
18-24	51	8.3	46	22.0	5	1.2
25-34	105	17.0	58	27.8	47	11.8
35-44	161	26.1	56	26.8	105	25.8
45-54	163	26.5	27	12.9	136	33.4
55-64	103	16.7	17	8.1	86	21.1
65 or over	33	5.4	5	2.4	28	6.9
Median age	44.4		35.1		48.4	
Men - total	478	100.0	113	100.0	365	100.0
18-24	27	5.6	23	20.3	4	1.1
25-34	61	12.8	29	25.7	32	8.8
35-44	124	25.9	29	25.7	95	26.0
45-54	139	29.1	15	13.3	124	34.0
55-64	99	20.7	15	13.3	84	23.0
65 or over	26	5.9	2	1.7	24	7.1
Median age	46.9		36.6		49.2	
Women - total	138	100.0	96	100.0	42	100.0
18-24	24	17.4	23	24.0	1	2.4
25-34	44	31.9	29	30.2	15	35.7
35-44	37	26.8	27	28.1	10	23.8
45-54	24	17.4	12	12.5	12	28.5
55-64	4	2.9	2	2.1	2	4.8
65 or over	5	3.6	3	3.1	2	4.8
Median age	35.3		33.6		40.0	

^aData obtained in NRP Field Survey: occupational-history schedule.

Table A-10.- PERCENTAGE DISTRIBUTION OF WORKERS IN SILK MILLS, BY AGE, 1890-1930^a

Age in years	1890 ^b	1900	1910	1920	1930
Total	100.0	100.0	100.0	100.0	100.0
10-44 ^c	90.4	90.1	86.7	82.5	71.6
45 or over	9.6	9.9	13.3	17.5	28.3
Unknown	n.a.	n.a.	n.a.	n.a.	0.1

^aData for 1890 were secured from *Eleventh Census of the United States: 1890, "Population"* (U. S. Dept. Int., Census Office, 1897), part II, pp. 708-9; for 1900, from *Twelfth Census of the United States: 1900, "Special Report on Occupations"* (U. S. Dept. Com. and Labor, Bur. Census, 1904), pp. 686-9. Data for the remaining years were secured from the following volumes of the U. S. Department of Commerce, Bureau of the Census: data for 1910, from *Thirteenth Census of the United States: 1910, "Population"* (1914), vol. IV, p. 587; for 1920, from *Fourteenth Census of the United States: 1920, "Population"* (1923), vol. IV, pp. 1191-2; for 1930, from *Fifteenth Census of the United States: 1930, "Population"* (1933), vol. IV, p. 1061.

^bFigures for 1890 are for cotton, woollen, and other textile mill operatives.

^cFigures for 1910 and 1920 include workers whose age was unknown.

n.a. Data not available.

Table A-11.- AGE OF BEGINNING WORK, BY SEX AND AGE OF WORKERS, 1936^a

Sex and age in 1936 in years	Total		Age of beginning work in years												Median age of beginning work
			Under 11		11-12		13-14		15-16		17-19		20 or over		
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	
Men - total ^b	475	100.0	21	4.4	61	12.9	127	26.7	130	27.4	97	20.4	39	8.2	15.4
18-34	88	100.0	0	-	2	2.3	16	18.2	37	42.0	27	30.7	6	6.8	16.4
35-44	123	100.0	5	4.1	9	7.3	39	31.7	37	30.1	25	20.3	8	6.5	15.5
45-54	138	100.0	9	6.5	25	18.1	27	19.6	32	23.2	26	18.8	19	13.8	15.5
55 or over	126	100.0	7	5.6	25	19.8	45	35.7	24	19.0	19	15.1	6	4.8	14.4
Women - total ^c	135	100.0	0	-	5	3.7	49	36.3	50	37.0	21	15.6	10	7.4	15.5
18-34	66	100.0	0	-	0	-	20	30.3	29	43.9	12	18.2	5	7.6	15.9
35-44	38	100.0	0	-	0	-	18	50.0	10	27.8	5	13.9	3	8.3	15.0
45-54	24	100.0	0	-	5	20.9	6	25.0	9	37.5	2	8.3	2	8.3	15.2
55 or over	9	†	0	-	0	-	5	†	2	†	2	†	0	-	†

^aData obtained in NRP Field Survey: occupational-history schedule.

^bExcludes three men who did not report age of beginning work.

^cExcludes three women who did not report age of beginning work.

† Base too small for calculation.

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Table A-12.- SCHOOL GRADE COMPLETED, BY SEX AND AGE OF WORKERS, 1936^a

Sex and age in 1936 in years	Total		School grade completed								Median school grade com- pleted
			None		1-6		7-8		9-16		
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	
Men - total ^b	473	100.0	127	26.8	154	32.6	145	30.7	47	9.9	5.3
18-34	88	100.0	4	4.5	10	11.4	44	50.0	30	34.1	6.4
35-44	121	100.0	31	25.6	46	38.0	41	33.9	3	2.5	4.8
45-54	139	100.0	52	37.4	52	37.4	30	21.6	5	3.6	3.0
55 or over	125	100.0	40	32.0	46	36.8	30	24.0	9	7.2	3.9
Women - total ^c	137	100.0	6	4.4	36	26.3	78	56.9	17	12.4	7.7
18-34	68	100.0	1	1.5	10	14.7	44	64.7	13	19.1	8.0
35-44	36	100.0	1	2.8	10	27.8	21	58.3	4	11.1	7.7
45-54	24	100.0	4	16.7	12	50.0	8	33.3	0	-	5.0
55 or over	9	†	0	-	4	†	5	†	0	-	†

^aData obtained in NRP Field Survey: occupational-history schedule.^bExcludes five men who did not report school grade completed.^cExcludes one woman who did not report school grade completed.[†]Base too small for calculation.Table A-13.- MARITAL STATUS, BY SEX AND AGE OF WORKERS, 1936^a

Sex and age in years	Total		Married		Single		Divorced		Widowed	
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Men - total	478	100.0	370	77.4	80	16.7	10	2.1	18	3.8
18-34	88	100.0	36	40.9	51	58.0	1	1.1	0	-
35-44	124	100.0	109	87.9	11	8.9	2	1.6	2	1.6
45-54	139	100.0	120	86.3	13	9.4	4	2.9	2	1.4
55 or over	127	100.0	105	82.7	5	3.9	3	2.4	14	11.0
Women - total	138	100.0	27	19.6	61	58.7	12	8.7	18	13.0
18-34	68	100.0	23	33.8	40	58.8	3	4.4	2	3.0
35-44	37	100.0	9	24.3	23	62.2	4	10.8	7	18.9
45-54	24	100.0	1	4.2	11	45.8	4	16.7	8	33.3
55 or over	9	†	0	-	7	†	1	†	1	†

^aData obtained in NRP Field Survey: occupational-history schedule.[†]Base too small for calculation.

Table A-14.- ADDITIONAL INDUSTRY ATTACHMENT OF FOUR GROUPS OF BROAD-SILK WORKERS, 1926-35^a

Groups of Paterson broad-silk workers	Total	Other textiles			Nontextiles		
		Total	Jacquard	Other	Total	Trade	Other ^b
In broad silk only, 1926-35; in specified industry in 1936	35	20	8	12	15	4	11
In broad silk but entered specified industry prior to 1935	26	22	17	5	4	3	1
In broad silk, 1926-36, with supplementary employment in specified industry	116	66	42	26	48	10	38
Entered broad silk from specified industry, 1926-35	44	26	7	19	18	9	9

^aData obtained in NRP Field Survey: occupational-history schedule.

^bIncludes mainly factory operatives in other industries, servants, and restaurant employees.

Table A-15.- LOCATION OF FIRST JOB OF PATERSON BROAD-SILK WORKERS, BY INDUSTRY OF FIRST JOB AND PLACE OF BIRTH^a

Industry and location of first job	Total		Place of birth					
			Paterson		Rest of United States		Foreign country	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Total	616	100.0	150	100.0	59	100.0	407	100.0
Paterson	297	48.2	145	96.7	31	52.5	121	29.7
Rest of United States	117	19.0	5	3.3	28	47.5	84	20.6
Foreign country	202	32.8	0	-	0	-	202	49.7
Broad silk	198	100.0	74	100.0	21	100.0	103	100.0
Paterson	139	70.2	70	94.6	17	81.0	52	50.5
Rest of United States	37	18.7	4	5.4	4	19.0	29	28.1
Foreign country	22	11.1	0	-	0	-	22	21.4
Other textile	251	100.0	52	100.0	18	100.0	181	100.0
Paterson	103	41.0	51	98.1	10	55.6	42	23.2
Rest of United States	30	12.0	1	1.9	8	44.4	21	11.6
Foreign country	118	47.0	0	-	0	-	118	65.2
Other industry	162	100.0	24	100.0	19	100.0	119	100.0
Paterson	55	34.0	24	100.0	4	21.1	27	22.7
Rest of United States	49	30.2	0	-	15	78.9	34	26.6
Foreign country	58	35.8	0	-	0	-	58	48.7
Not reported	5	f	0	-	1	f	4	f
Paterson	0	-	0	-	0	-	0	-
Rest of United States	1	f	0	-	1	f	0	-
Foreign country	4	f	0	-	0	-	4	f

^aData obtained in NRP Field Survey: occupational-history schedule.

^fBase too small for calculation.

Table A-16.- SHOPS IN PAY-ROLL SAMPLE, BY NUMBER OF LOOMS AND TYPE OF OPERATION, 1926-36^a

Shop number ^b	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Total	130	184	552	697	727	897	905	943	993	1,007	1,011
1	34 ^c	36 ^c	36 ^c	36 ^c	68 ^e	68 ^e	68 ^e	68 ^e	68 ^e	68 ^e	68
2	10	16	18	18	16	18	18	(f)	18	18	18
3	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d	28 ^d
4	24 ^c	30 ^b	30 ^c	30 ^c	22 ^e	22 ^e	24 ^e	24 ^e	24 ^e	24 ^e	28
5	34	34	30	30	30	30	30 ^e	30 ^e	30 ^e	30 ^e	30 ^c
6	-	40 ^c	40 ^e	40 ^e	48 ^c	48 ^c	40 ^c	40 ^e	40 ^c	50 ^c	50 ^c
7	-	-	22	22	24	24	24	24	24	24	24
8	-	-	112 ^c	188 ^c	184 ^c	212 ^c	220 ^c	196 ^c	196 ^c	196 ^c	196 ^c
9	-	-	60 ^c	60 ^c	60 ^e	60 ^e	60 ^e	60 ^c	60 ^c	60 ^b	60 ^c
10	-	-	22 ^c	22 ^c	22 ^e	22 ^e	22 ^e	22 ^e	22 ^e	22 ^e	22
11	-	-	156 ^c	145 ^c	145 ^c	145 ^c	135 ^c	145 ^c	145 ^e	145	145
12	-	-	-	80	80	80	80	88	88	88	88
13	-	-	-	-	-	60	60	64	64	60	60
14	-	-	-	-	-	48	48	48	48	48	48
15	-	-	-	-	-	16	16	16	20	20	20
16	-	-	-	-	-	16	16	16	20	20	20
17	-	-	-	-	-	-	16 ^e	16 ^e	18 ^e	18 ^e	18
18	-	-	-	-	-	-	-	20	20	20	20
19	-	-	-	-	-	-	-	-	20	20	20
20	-	-	-	-	-	-	-	-	20	20	20
21	-	-	-	-	-	-	-	-	-	12	12
22	-	-	-	-	-	-	-	-	-	16	16

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops.
^bShops operate on a commission basis except as otherwise specified.
^cIndependent.
^dBoth commission and independent at some time during the year.

^eNot specified.
^fShop closed down, but listed in *Davies's Rayon and Silk Trades* as having 16 looms and included in total loomage for year.

Table A-17.- SHOPS IN PAY-ROLL SAMPLE, BY NUMBER OF MONTHS IN OPERATION, 1926-36^a

Shop number	Average during period	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
1	10.52	12.00	12.00	11.75	11.50	11.75	10.75	9.50	8.75	11.00	8.00	8.75
2	7.43	11.50	9.25	9.25	10.00	9.75	2.75	0.75	(b)	8.00	9.25	3.75
3	9.32	9.50	11.00	12.00	11.50	10.50	7.50	8.50	7.75	9.50	11.25	3.50
4	10.50	12.00	12.00	12.00	12.00	12.00	10.75	10.75	9.25	11.50	9.50	3.75
5	11.14	12.00	12.00	12.00	12.00	12.00	12.00	7.00	9.25	12.00	12.00	10.25
6	10.28	-	7.50 ^c	12.00	9.50	5.75	10.00	11.75	9.75	11.25	11.75	10.75
7	10.19	-	-	11.50	9.75	8.00	11.50	8.50	8.50	10.25	11.75	12.00
8	10.97	-	-	6.00 ^c	10.25	12.00	11.00	12.00	9.25	10.25	11.00	12.00
9	11.25	-	-	9.75 ^c	12.00	12.00	11.00	11.75	8.25	12.00	11.00	12.00
10	4.47	-	-	5.25 ^c	7.50	2.25	3.50	1.75	2.25	7.25	8.50	2.75
11	8.41	-	-	7.75 ^c	3.75	11.50	9.50	2.75	5.00	11.25	11.50	12.00
12	11.19	-	-	-	12.00	11.50	10.25	12.00	10.25	11.25	10.25	12.00
13	11.29	-	-	-	-	-	11.00	11.75	9.00	12.00	12.00	12.00
14	10.50	-	-	-	-	-	8.75	11.50	9.25	10.50	11.50	11.50
15	11.04	-	-	-	-	-	12.00	11.50	9.50	11.00	10.25	12.00
16	10.75	-	-	-	-	-	3.00 ^c	11.00	8.50	10.75	11.75	11.75
17	8.88	-	-	-	-	-	-	6.00 ^c	7.00	10.25	11.00	7.25
18	9.67	-	-	-	-	-	-	-	4.75 ^c	10.00	11.00	8.00
19	7.58	-	-	-	-	-	-	-	-	9.75	6.50	6.50
20	7.58	-	-	-	-	-	-	-	-	8.25	8.50	6.00
21	†	-	-	-	-	-	-	-	-	-	11.00	7.50
22	†	-	-	-	-	-	-	-	-	-	8.75 ^c	11.25
Average for all shops	9.77	11.40	11.25	11.50	10.15	9.92	9.48	8.92	8.22	10.40	10.44	8.97

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 63, fn. 5 for method of determining number of months in operation.

^bShop closed down.

^cRecords not available for entire year; incomplete records were not used in computation of averages.

^dBase too small for calculation.

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Table A-18.- SHOPS IN PAY-ROLL SAMPLE, BY NUMBER OF MONTHS OPERATING A NIGHT SHIFT, 1927-36^a

Shop number	Average during period	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
1	6.65	-	-	-	-	-	1.75	7.00	10.00	8.00	6.50
3	1.80	-	-	-	-	2.25	1.25	0.50	3.75	1.25	-
4	4.34	4.00	0.75	5.00	-	-	1.25	6.00	5.50	6.50	1.75
5	1.33	-	-	-	-	-	-	1.00	0.50	2.50	-
6	f	-	-	-	-	1.00	-	-	-	-	3.25
7	4.94	-	6.00	1.75	-	1.00	3.00	7.25	4.25	6.50	7.75
10	3.67	-	-	-	-	0.50	0.75	2.25	7.25	8.50	2.75
11	6.46	-	4.00 ^b	3.25	4.25	2.00	-	-	9.75	9.75	9.75
12	8.86	-	-	-	6.50	6.50	11.50	9.50	10.00	10.00	6.00
13	5.04	-	-	-	-	6.25	2.75	3.25	10.25	4.75	3.00
14	3.54	-	-	-	-	2.75	0.75	2.00	5.75	3.00	7.00
17	f	-	-	-	-	-	-	-	-	1.00	-
19	4.17	-	-	-	-	-	-	-	5.25	4.00	3.25
20	5.42	-	-	-	-	-	-	-	7.75	5.75	2.75
22	f	-	-	-	-	-	-	-	-	6.50 ^b	9.75
Average for all shops	4.84	f	f	3.33	f	2.76	2.86	4.53	6.67	5.61	5.29

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 63, fn. 5 for method of determining number of months in operation. None of the shops operated a night shift in 1928.

^bRecords not available for entire year; incomplete records were not used in computation of averages.

^cBase too small for calculation.

Table A-19.- MONTHLY AND YEARLY INDEX OF EMPLOYMENT, IN 12 IDENTICAL SHOPS, 1929-36^a
(1929=100)

Year	Yearly	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1929	100.0	126.7	128.1	118.4	101.0	72.8	62.5	99.5	102.4	103.4	101.9	93.2	69.9
1930	118.9	86.9	138.8	153.9	142.2	119.4	101.4	51.5	64.9	111.8	134.0	146.6	155.3
1931	115.3	146.0	164.6	169.9	166.4	140.8	99.0	114.6	21.8	57.6	101.4	93.7	103.9
1932	99.3	105.8	122.6	106.6	105.8	106.3	84.5	59.7	79.6	101.0	120.4	111.7	87.9
1933	84.0	92.2	99.5	81.6	94.2	120.9	125.7	111.2	116.0	72.8	1.5	9.2	84.0
1934	119.3	113.1	164.6	161.2	140.8	96.6	86.4	96.1	127.7	56.3	129.6	117.0	139.3
1935	126.7	146.1	161.7	136.3	142.7	128.6	96.5	129.6	151.5	154.4	143.7	96.4	60.2
1936	108.5	96.5	97.6	95.6	91.7	90.6	104.9	103.9	121.4	121.4	125.7	125.2	125.7

^aData obtained in NRP Field Survey: pay-roll sample for 12 of 22 shops. See p. 66, fn. 11 for method of determining man-weeks worked.

Table A-20.- RATIO OF PERSONS ON PAY ROLL TO AVERAGE NUMBER REQUIRED, 1926-36^a

Shop number	Yearly average	1925	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
1	2.3	1.5	1.3	1.4	2.1	1.8	1.5	2.0	4.3	2.8	1.9	2.0
2	2.4	2.6	3.5	2.0	1.9	1.6	1.2	2.2	(b)	4.0	1.7	1.8
3	5.1	4.5	5.2	5.1	5.7	4.1	3.7	8.7	5.2	4.8	5.2	1.0
4	2.5	1.4	3.2	2.6	2.8	1.9	1.7	4.5	3.3	2.0	1.6	2.4
5	3.1	2.3	2.5	2.9	2.6	2.4	3.5	3.8	4.0	3.2	3.9	4.3
6	4.9	-	(c)	4.0	4.4	3.6	4.8	3.6	3.8	6.1	7.6	6.8
7	4.2	-	-	5.0	5.4	5.4	4.4	5.1	4.5	3.2	3.2	2.9
8	1.9	-	-	(d)	2.7	2.2	2.0	2.1	1.8	1.7	1.3	1.5
9	2.7	-	-	(e)	4.1	2.3	3.2	3.1	2.8	2.0	2.0	1.8
10	3.2	-	-	(e)	5.1	4.0	2.5	3.0	1.2	2.6	5.6	3.4
11	5.0	-	-	(e)	2.2	8.3	4.9	2.2	6.5	5.1	6.5	5.9
12	2.9	-	-	-	3.6	5.1	3.3	2.8	2.2	2.0	2.1	2.6
13	3.7	-	-	-	-	-	4.1	4.5	2.8	2.5	4.6	4.0
14	3.0	-	-	-	-	-	3.7	4.8	3.4	2.4	2.2	2.6
15	3.8	-	-	-	-	-	2.1	3.2	1.9	3.3	5.5	4.8
16	3.2	-	-	-	-	-	(e)	6.2	4.6	2.5	1.4	3.7
17	2.5	-	-	-	-	-	-	(e)	1.9	1.8	3.8	2.5
18	7.3	-	-	-	-	-	-	-	(e)	7.5	6.5	8.3
19	3.5	-	-	-	-	-	-	-	-	3.6	3.2	3.6
20	2.8	-	-	-	-	-	-	-	-	2.2	2.9	3.5
21	f	-	-	-	-	-	-	-	-	-	2.6	2.9
22	g	-	-	-	-	-	-	-	-	-	(c)	3.9
Average for all shops	3.1	2.2	2.6	3.3	3.0	3.9	3.2	3.4	3.0	2.6	3.0	3.0

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 68, fn. 12 for method of determining this ratio.

^bShop closed down.

^cRecords not available for entire year; incomplete records were not used in computation of averages.

^dBase too small for calculation.

Table A-21.- PERCENTAGE OF PERSONS WORKING AT INDIVIDUAL SHOPS WHO RECEIVED OVER 1 WEEK OF EMPLOYMENT PER 2-WEEK PAY PERIOD, 1926-36^a

Year	Yearly	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1926	83.4	82.6	87.7	84.8	84.3	83.8	86.0	82.1	84.3	81.8	82.5	79.8	82.2
1927	85.2	78.8	84.2	87.6	93.5	86.0	76.7	77.6	86.4	86.2	90.2	82.0	88.8
1928	76.3	86.6	81.3	89.1	86.2	77.5	81.1	78.9	73.8	72.6	68.8	67.5	76.7
1929	82.6	76.7	83.4	87.7	79.6	80.5	81.8	81.1	79.7	83.9	85.1	87.9	81.8
1930	77.1	65.5	78.1	75.0	80.6	77.7	69.3	63.3	79.1	77.1	85.4	81.5	60.5
1931	76.7	77.5	85.9	88.5	86.3	74.9	69.4	69.6	49.7	54.9	61.8	73.9	73.2
1932	71.3	69.0	82.8	81.4	81.5	71.6	55.0	56.9	56.6	72.8	76.4	80.3	58.5
1933	68.6	71.5	73.4	56.9	67.2	79.3	69.5	68.4	76.3	46.0	11.1	43.9	73.9
1934	75.7	80.0	85.8	85.8	75.7	60.8	72.3	63.0	76.9	52.1	75.2	79.7	75.2
1935	74.0	68.2	80.0	73.9	80.1	72.1	70.5	70.3	79.9	75.5	79.4	54.7	75.3
1936	70.8	76.4	76.8	74.0	67.2	71.8	67.6	64.5	67.3	69.6	77.3	72.8	66.5

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops.

Table A-22.- MONTHLY AND YEARLY LABOR TURN-OVER RATES OF ALL WORKERS AT INDIVIDUAL SHOPS, 1926-36^a

(Rate per 100 employees)

Year	Yearly	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accession rate													
1926	184.7	13.1	7.9	20.4	12.7	9.3	15.1	17.6	15.4	22.1	15.4	16.1	19.6
1927	223.5	28.1	14.6	9.5	10.0	33.9	17.9	24.4	18.5	12.8	30.8	7.2	15.6
1928	393.2	26.8	24.0	14.8	33.3	26.3	28.8	28.4	41.5	54.5	34.0	33.7	47.1
1929	366.8	24.2	22.9	23.8	30.6	32.4	56.7	32.7	37.5	54.8	22.5	16.1	12.6
1930	467.2	66.9	47.4	41.7	23.1	36.5	20.2	47.0	52.6	40.8	29.5	39.5	22.0
1931	415.0	42.1	27.3	28.7	27.5	15.2	19.9	46.2	13.5	109.5	35.9	25.7	23.5
1932	342.1	33.3	24.6	13.9	29.7	29.5	24.6	19.5	64.1	47.6	25.6	10.3	19.4
1933	481.9	21.5	21.3	20.9	50.3	22.7	30.7	29.3	35.4	10.1	25.0	116.7	98.0
1934	326.3	30.4	41.5	17.8	15.6	10.6	34.8	45.0	44.9	17.2	18.6	19.2	30.7
1935	374.8	35.6	22.3	35.4	32.5	25.1	29.8	65.7	36.9	26.8	12.8	12.1	39.8
1936	382.4	49.5	17.1	26.0	37.3	22.6	36.9	45.9	34.0	25.7	26.2	32.2	29.0
First accession rate													
1926	111.9	13.1	6.3	14.1	7.9	5.6	1.9	13.7	9.6	11.9	9.2	9.7	8.9
1927	144.6	15.8	7.4	3.8	6.0	23.2	11.9	16.7	13.6	7.7	25.3	4.8	6.4
1928	251.4	19.6	18.0	2.8	19.0	12.6	21.6	21.3	26.7	40.3	25.6	16.1	27.8
1929	218.5	15.7	14.9	13.8	18.5	21.2	39.0	27.4	24.3	15.7	13.7	8.8	5.5
1930	233.0	17.4	28.7	32.0	15.5	24.2	9.3	3.8	15.2	25.8	18.8	27.6	14.7
1931	179.8	15.0	21.1	22.8	16.8	10.7	8.8	21.0	4.5	16.7	10.4	15.7	14.3
1932	176.4	20.3	13.6	6.6	17.4	12.9	6.1	7.8	37.8	29.0	16.5	5.0	5.2
1933	206.7	8.7	11.9	8.9	19.4	13.1	20.3	20.8	28.5	5.5	25.0	36.7	7.9
1934	134.4	20.7	23.8	10.9	5.6	3.2	9.6	11.5	17.7	3.1	11.2	7.8	9.3
1935	143.4	22.6	14.8	13.7	11.4	4.1	5.4	15.2	20.7	17.5	5.0	5.6	7.4
1936	168.7	15.5	4.0	6.5	13.8	8.1	15.6	20.7	20.6	15.4	14.2	16.2	16.1

Rehiring rate													
1926	72.8	-	1.6	6.3	4.8	3.7	13.2	3.9	5.8	10.2	6.2	6.4	10.7
1927	78.9	12.3	7.4	5.7	4.0	10.7	6.0	7.7	4.9	5.1	5.5	2.4	7.2
1928	141.8	7.2	6.0	12.0	14.3	13.7	7.2	7.1	14.8	14.2	8.4	17.6	19.3
1929	148.3	8.5	8.0	10.0	12.1	11.2	17.7	5.3	13.2	39.1	8.8	7.3	7.1
1930	234.2	49.5	18.7	9.7	7.6	12.3	10.9	43.2	37.4	15.0	10.7	11.9	7.3
1931	235.2	27.1	6.2	5.9	8.7	4.5	11.1	25.2	9.0	92.8	25.5	10.0	9.2
1932	163.7	13.0	10.8	7.3	12.3	16.6	16.5	11.7	26.3	16.6	9.1	5.3	14.2
1933	275.2	12.8	9.4	12.0	30.9	9.6	10.4	8.5	6.9	4.6	-	80.0	90.1
1934	191.9	9.7	17.7	6.9	10.0	7.4	25.2	33.5	27.2	14.1	7.4	11.4	21.4
1935	231.4	13.0	7.5	21.7	21.1	21.0	24.4	50.5	16.2	9.3	7.8	6.5	32.4
1936	213.7	34.0	13.1	19.5	23.5	14.5	21.3	25.2	13.4	10.3	12.0	14.0	12.9
Total separation rate													
1926	192.3	8.2	15.9	7.8	28.6	20.4	11.4	21.6	5.8	6.8	15.4	29.0	21.4
1927	199.6	26.4	5.6	18.9	16.0	7.1	27.4	21.8	16.0	15.4	19.8	16.8	8.4
1928	405.3	20.7	40.0	19.4	33.3	23.7	47.8	30.3	35.8	32.2	40.0	49.7	32.4
1929	429.6	21.1	31.6	36.1	55.6	38.8	26.7	31.0	61.7	29.4	22.9	17.1	57.6
1930	391.1	16.5	29.9	33.4	33.4	42.6	74.1	30.3	19.7	20.4	19.5	28.8	42.5
1931	449.8	21.1	22.0	29.5	26.2	46.4	45.9	66.5	100.0	19.9	28.0	21.4	23.9
1932	352.6	20.6	25.5	23.9	29.4	35.4	33.9	36.4	35.9	31.6	32.0	19.9	28.1
1933	451.7	15.5	17.5	47.5	22.8	19.6	23.6	25.6	33.8	109.2	87.5	36.7	12.4
1934	387.7	28.2	22.1	23.7	23.6	46.0	38.4	37.7	27.3	76.9	22.1	24.0	17.7
1935	426.5	24.6	35.3	26.4	38.2	58.8	37.8	39.5	29.9	27.1	24.7	64.1	20.1
1936	332.9	26.1	27.9	35.5	30.5	22.4	39.6	22.2	25.8	26.9	26.2	30.8	19.0

See footnotes at end of table.

Table A-22.- MONTHLY AND YEARLY LABOR TURN-OVER RATES OF ALL WORKERS AT INDIVIDUAL SHOPS, 1926-36 - Continued

(Rate per 100 employees)

Year	Yearly	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Lay-off rate - short time ^b													
1926	41.4	-	3.2	3.1	1.6	11.1	3.8	2.0	1.9	1.7	3.0	6.4	3.6
1927	26.3	1.8	1.9	3.8	6.0	1.8	3.6	2.6	1.2	-	-	3.6	-
1928	89.1	2.1	3.0	5.5	15.9	1.0	5.9	5.2	6.0	4.3	6.0	24.9	7.3
1929	108.9	2.4	3.1	3.8	6.0	3.7	1.6	4.4	33.6	4.7	1.7	2.0	41.9
1930	59.9	3.4	5.3	2.2	3.3	4.7	13.4	7.6	4.5	2.3	2.3	2.7	8.2
1931	70.4	3.9	2.0	3.6	2.2	5.2	16.6	1.9	22.5	1.8	4.3	1.0	5.4
1932	67.3	4.1	4.5	2.7	3.6	9.3	3.9	13.0	4.3	2.0	2.1	7.5	10.1
1933	73.2	3.4	2.9	26.6	3.3	2.6	1.8	2.5	1.4	1.7	25.0	-	2.0
1934	117.7	13.0	1.7	6.5	2.9	5.1	3.9	7.0	5.2	56.3	3.7	7.3	5.1
1935	112.5	3.2	11.2	5.8	15.0	22.4	16.4	16.6	3.8	3.8	0.9	6.5	4.9
1936	61.3	3.9	3.0	9.2	5.8	5.1	11.4	4.2	3.5	4.6	4.6	4.6	1.2
Lay-off rate - long time ^c													
1926	64.3	4.9	4.8	1.6	9.5	5.6	3.8	3.9	3.9	1.7	6.2	11.3	7.1
1927	69.1	3.5	-	5.7	6.0	3.5	11.9	5.1	3.7	9.0	9.9	4.8	6.0
1928	127.3	9.3	19.0	7.4	2.3	7.4	21.6	7.7	8.0	8.2	17.2	8.8	10.4
1929	118.1	6.1	7.3	11.9	22.0	19.7	6.0	7.1	5.1	9.5	8.4	5.4	6.6
1930	130.8	1.7	5.0	6.9	9.1	14.6	37.2	17.4	7.1	3.9	4.4	4.2	19.1
1931	163.1	3.4	5.9	4.0	2.8	13.2	14.2	39.6	66.2	5.4	8.6	10.0	9.6
1932	114.7	4.4	9.0	8.0	12.7	9.6	19.6	15.2	6.2	5.1	8.0	6.5	10.4
1933	210.3	2.7	5.1	13.5	4.7	7.4	3.9	6.3	14.7	94.8	37.5	16.7	3.0
1934	140.9	4.0	3.3	5.9	10.9	27.3	21.6	19.6	9.8	17.5	9.1	6.1	5.6
1935	138.3	6.8	8.3	8.1	9.5	18.3	9.2	8.6	4.4	4.7	11.0	42.4	7.0
1936	79.7	7.6	11.2	15.4	12.2	4.1	11.7	4.2	5.5	4.6	2.2	1.0	-

Final separation rate^d

1926	86.6	3.3	7.9	3.1	17.5	3.7	3.8	15.7	-	3.4	6.2	11.3	10.7
1927	104.2	21.1	3.7	9.4	4.0	1.8	11.9	14.1	11.1	6.4	9.9	8.4	2.4
1928	188.9	9.3	18.0	6.5	15.1	15.3	20.3	17.4	19.8	19.7	16.8	16.0	14.7
1929	202.6	12.6	21.2	20.4	27.6	15.4	17.1	19.5	23.0	16.2	12.8	9.7	7.1
1930	200.4	11.4	19.6	24.3	21.0	23.1	23.5	5.3	8.1	14.2	12.8	21.9	15.2
1931	196.3	13.6	14.1	21.9	21.2	28.0	15.1	24.8	11.3	11.7	15.1	10.4	8.9
1932	170.6	12.1	12.0	13.2	12.9	16.5	10.4	6.2	25.4	24.5	21.9	5.9	7.6
1933	168.2	9.4	9.5	7.4	14.8	9.6	17.9	16.8	17.7	12.7	25.0	20.0	7.4
1934	129.1	11.2	17.1	11.3	9.8	13.6	12.9	10.9	12.3	3.1	9.3	10.6	7.0
1935	175.7	14.6	15.8	12.5	13.7	18.1	10.4	14.1	21.7	18.6	12.8	15.2	6.2
1936	191.9	14.6	13.7	10.9	12.5	13.2	16.5	13.8	16.8	17.5	19.4	25.2	17.8

Replacement rate^e

1926	184.7	8.2	7.9	7.8	12.7	9.3	11.4	17.6	5.8	6.8	15.4	16.1	19.6
1927	199.6	26.4	5.6	9.5	10.0	7.1	17.9	21.8	16.0	12.8	19.8	7.2	8.4
1928	393.2	20.7	24.0	14.8	33.3	23.7	28.8	28.4	35.8	32.2	34.0	33.7	32.4
1929	366.8	21.1	22.9	23.8	30.6	32.4	26.7	31.0	37.5	29.4	22.5	16.1	12.6
1930	391.1	16.5	29.9	33.4	23.1	36.5	20.2	30.3	19.7	20.4	19.5	28.8	22.0
1931	415.0	21.1	22.0	28.7	26.2	15.2	19.9	46.2	13.5	18.9	26.0	21.4	23.5
1932	342.1	20.6	24.6	13.9	29.4	29.5	24.6	19.5	35.9	31.6	25.6	10.3	19.4
1933	451.7	15.5	17.5	20.9	22.8	19.8	23.6	25.6	33.6	10.1	25.0	36.7	12.4
1934	326.3	26.2	22.1	17.8	15.6	10.6	34.8	37.7	27.3	17.2	18.6	19.2	17.7
1935	374.6	24.6	22.3	26.4	32.5	25.1	29.8	39.5	29.9	26.8	12.8	12.1	20.1
1936	332.9	26.1	17.1	26.0	30.5	22.4	36.9	22.2	25.8	25.7	26.2	30.8	19.0

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 71, fn. 17 for method of determining labor turn-over rates.

^bAny separation of less than 28 days.

^cAny separation of 28 days or more.

^dAny separation failing to accede again to pay roll during entire period for which data were taken.

^eThe annual replacement rate represents not the total of the monthly rates (as is the case for the other turn-over rates), but either the yearly accession or yearly separation rate, whichever is the lower.

PATERSON BROAD-SILK WORKERS

Table A-23.- DISTRIBUTION OF ALL PERSONS WHO WORKED
AT INDIVIDUAL SHOPS, BY NUMBER OF WEEKS WITH WORK
AND NUMBER OF EMPLOYMENT PERIODS,
1926-28^a

Number of weeks with work	Total			Number of employment periods		
	Number	Percent	Cumulative percent	1	2	3 or over
1926						
Total	120	100.0	-	74.2	20.0	5.8
1- 2	18	15.0	15.0	14.2	0.8	0
3- 4	7	5.8	20.8	3.3	1.7	0.8
5- 9	16	13.3	34.1	10.8	2.5	0
10-13	9	7.5	41.6	5.9	0.8	0.8
14-18	12	10.0	51.6	8.4	0.8	0.8
19-22	3	2.5	54.1	1.7	0	0.8
23-26	11	9.2	63.3	4.9	2.5	1.8
27-35	10	8.3	71.6	5.0	2.5	0.8
36-44	11	9.2	80.8	3.8	5.9	0
45-51	11	9.2	90.0	6.7	2.5	0
52	12	10.0	100.0	10.0	0	0
1927						
Total	139	100.0	-	85.6	10.8	3.6
1- 2	37	26.6	26.6	25.9	0.7	0
3- 4	14	10.1	36.7	10.1	0	0
5- 9	16	11.5	48.2	11.5	0	0
10-13	14	10.1	58.3	5.1	4.3	0.7
14-18	8	4.3	62.6	2.9	0.7	0.7
19-22	3	2.2	64.8	1.5	0.7	0
23-26	7	5.0	69.8	3.5	1.5	0
27-35	6	4.3	74.1	2.1	0.7	1.5
36-44	8	5.8	79.9	4.4	0.7	0.7
45-51	8	5.8	85.7	4.3	1.5	0
52	20	14.3	100.0	14.3	0	0
1928						
Total	255	100.0	-	65.1	25.5	9.4
1- 2	65	25.5	25.5	24.3	1.2	0
3- 4	32	12.5	38.0	11.4	1.1	0
5- 9	45	17.6	55.6	12.1	5.1	0.4
10-13	19	7.5	63.1	5.1	2.0	0.4
14-18	15	5.9	69.0	2.3	2.0	1.6
19-22	14	5.5	74.5	1.8	1.6	2.3
23-26	8	3.1	77.6	1.2	1.2	0.7
27-35	14	5.5	83.1	1.2	1.9	2.4
36-44	16	6.3	89.4	1.6	3.9	0.8
45-51	24	9.4	98.8	3.1	5.5	0.8
52	9	1.2	100.0	1.2	0	0

See footnote at end of table.

Table A-28. - DISTRIBUTION OF ALL PERSONS WHO WORKED
AT INDIVIDUAL SHOPS, BY NUMBER OF WEEKS WITH WORK
AND NUMBER OF EMPLOYMENT PERIODS,
1928-28^a - Continued

Number of weeks with work	Total			Number of employment periods		
	Number	Percent	Cumulative percent	1	2	3 or over
1929						
Total	824	100.0	-	76.0	19.1	4.9
1- 2	217	26.3	26.3	24.9	1.4	0
3- 4	118	14.3	40.6	12.5	1.6	0.2
5- 9	120	14.6	55.2	12.4	1.7	0.5
10-13	78	9.5	64.7	7.7	1.3	0.5
14-18	80	9.7	74.4	7.9	1.7	0.1
19-22	49	5.8	80.2	2.3	2.5	1.0
23-26	54	6.6	86.8	0.8	5.7	0.1
27-35	38	4.6	91.4	2.4	1.0	1.2
36-44	25	3.0	94.4	0.8	1.0	1.2
45-51	32	3.9	98.3	2.6	1.2	0.1
52	14	1.7	100.0	1.7	0	0
1930						
Total	1,019	100.0	-	75.3	18.4	6.3
1- 2	352	34.5	34.5	34.0	0.5	0
3- 4	192	19.0	47.5	10.8	1.7	0.5
5- 9	165	16.2	63.7	13.2	2.7	0.3
10-13	71	7.0	70.7	4.9	1.5	0.6
14-18	84	8.3	77.0	4.4	1.0	0.9
19-22	42	4.1	81.1	1.9	1.3	0.9
23-26	19	1.9	83.0	0.5	0.9	0.5
27-35	46	4.5	87.5	1.0	2.1	1.4
36-44	42	4.1	91.6	0.6	2.6	0.9
45-51	61	7.9	99.5	3.5	4.1	0.3
52	5	0.5	100.0	0.5	0	0
1931						
Total	1,101	100.0	-	66.8	23.8	9.4
1- 2	345	31.3	31.3	30.8	0.5	0
3- 4	156	14.2	45.5	12.4	1.5	0.3
5- 9	161	14.6	60.1	11.4	2.5	0.7
10-13	71	6.4	66.5	4.4	1.2	0.6
14-18	60	5.4	71.9	2.9	1.5	1.0
19-22	57	5.2	77.1	3.4	1.2	0.6
23-26	39	3.0	80.1	0.7	1.5	0.8
27-35	45	4.1	84.2	0.3	2.1	1.7
36-44	86	7.8	92.0	0	4.8	3.0
45-51	83	7.6	99.6	0.1	7.0	0.5
52	4	0.4	100.0	0.4	0	0

See footnote at end of table.

PATERSON BROAD-SILK WORKERS

Table A-23.- DISTRIBUTION OF ALL PERSONS WHO WORKED
AT INDIVIDUAL SHOPS, BY NUMBER OF WEEKS WITH WORK
AND NUMBER OF EMPLOYMENT PERIODS,
1926-26^a - Continued

Number of weeks with work	Total			Number of employment periods		
	Number	Percent	Cumulative percent	1	2	3 or over
1932						
Total	964	100.0	-	75.4	15.2	9.4
1- 2	336	34.8	34.8	34.0	0.8	0
3- 4	96	10.0	44.8	8.4	1.5	0.1
5- 9	153	15.9	60.7	12.5	2.1	1.3
10-13	46	4.8	65.5	3.0	1.2	0.6
14-18	62	6.4	71.9	3.7	2.0	0.7
19-22	34	3.5	75.4	1.8	1.2	0.5
23-26	24	2.5	77.9	1.1	0.6	0.5
27-35	50	5.2	83.1	1.5	1.7	2.0
36-44	79	8.1	91.2	2.7	2.4	3.0
45-51	74	7.7	98.9	5.6	1.7	0.4
52	11	1.1	100.0	1.1	0	0
1933						
Total	930	100.0	-	52.8	35.6	11.6
1- 2	281	30.2	30.2	28.7	1.5	0
3- 4	97	10.4	40.6	7.4	2.9	0.1
5- 9	175	18.8	59.4	9.9	8.5	0.4
10-13	54	5.8	65.2	1.7	3.7	0.4
14-18	59	6.3	71.5	2.0	3.4	0.9
19-22	35	3.8	75.3	1.0	1.8	1.0
23-26	37	4.0	79.3	1.0	1.5	1.5
27-35	117	12.6	91.9	1.0	5.3	6.3
36-44	75	8.1	100.0	0.1	7.0	1.0
45-51	0	0	100.0	0	0	0
52	0	0	100.0	0	0	0
1934						
Total	1,064	100.0	-	52.6	22.9	24.3
1- 2	288	26.6	26.6	25.5	1.1	0
3- 4	99	9.1	35.7	6.9	1.8	0.4
5- 9	144	13.9	49.0	7.6	4.1	1.6
10-13	78	7.2	56.2	4.0	2.0	1.2
14-18	89	8.2	64.4	3.5	3.6	1.1
19-22	41	3.8	68.2	1.1	1.5	1.2
23-26	37	3.4	71.6	1.5	1.2	0.7
27-35	67	6.2	77.8	0.7	1.1	4.4
36-44	179	16.5	94.3	0.1	4.4	12.0
45-51	60	5.5	99.8	1.7	2.1	1.7
52	2	0.2	100.0	0.2	0	0

See footnote at end of table.

Table A-28.- DISTRIBUTION OF ALL PERSONS WHO WORKED
AT INDIVIDUAL SHOPS, BY NUMBER OF WEEKS WITH WORK
AND NUMBER OF EMPLOYMENT PERIODS,
1926-36^a - Continued

Number of weeks with work	Total			Number of employment periods		
	Number	Percent	Cumulative percent	1	2	3 or over
1935						
Total	1,192	100.0	-	63.4	24.9	11.7
1- 2	379	31.8	31.8	30.5	1.3	0
3- 4	116	9.7	41.5	7.2	2.3	0.2
5- 9	166	13.9	55.4	10.6	2.1	1.2
10-13	77	6.5	61.9	3.7	1.7	1.1
14-18	75	6.3	68.2	3.1	1.9	1.3
19-22	59	4.9	73.1	2.3	1.2	1.4
23-26	31	2.6	75.7	0.9	0.8	0.9
27-35	84	7.0	82.7	1.0	2.0	4.0
36-44	108	9.1	91.8	3.2	4.4	1.5
45-51	94	7.9	99.7	0.6	7.2	0.1
52	4	0.3	100.0	0.3	0	0
1936						
Total	1,118	100.0	-	72.4	19.8	8.0
1- 2	350	31.3	31.3	30.4	0.9	0
3- 4	126	11.3	42.6	9.1	2.0	0.2
5- 9	192	17.2	59.8	11.9	3.5	1.8
10-13	72	6.4	66.2	3.6	2.2	0.4
14-18	57	5.1	71.3	2.4	1.3	1.4
19-22	43	3.8	75.1	1.5	1.3	1.0
23-26	44	3.9	79.0	1.9	1.2	0.8
27-35	65	5.8	84.8	1.9	2.3	1.6
36-44	61	5.5	90.3	1.7	3.0	0.8
45-51	67	6.0	96.3	4.1	1.9	0
52	41	3.7	100.0	3.7	0	0

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 66, fn. 11 for method of determining weeks with work.

Table A-24.- NUMBER OF WEEKS WITH WORK AND AVERAGE LENGTH OF EMPLOYMENT PERIOD, BY NUMBER OF EMPLOYMENT PERIODS FOR ALL PERSONS WHO WORKED AT INDIVIDUAL SHOPS, 1926-1930

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PATERSON BROAD-SILK WORKERS

Number of employment periods	All workers			Workers with $\frac{1}{2}$ year or less with work			Workers with over $\frac{1}{2}$ to 1 year with work		
	Total	Average number of weeks		Total	Average number of weeks		Total	Average number of weeks	
		With work	Employment period		With work	Employment period		With work	Employment period
1926									
Total	120	22.7	17.2	76	10.4	8.0	44	44.0	32.8
1	89	21.8	21.8	59	9.4	9.4	30	46.3	46.3
2	24	27.0	13.5	11	12.2	6.1	13	39.4	19.7
3 or over	7	19.2	6.4	6	f	5.5	1	f	11.7
1927									
Total	139	19.0	15.8	97	7.1	6.0	42	46.4	36.8
1	119	18.4	18.4	84	6.1	6.1	35	47.9	47.9
2	15	21.4	10.7	11	14.0	7.0	4	f	21.0
3 or over	5	25.9	7.2	2	f	3.3	3	f	10.4
1928									
Total	255	15.5	10.3	198	7.4	5.4	57	43.7	22.2
1	186	10.0	10.0	148	5.5	5.5	18	46.6	46.6
2	65	26.6	13.3	38	11.2	5.6	29	44.2	22.1
3 or over	24	28.1	7.2	14	18.2	5.0	10	36.7	10.2
1929									
Total	824	12.6	9.6	715	8.3	6.6	109	40.6	24.2
1	626	9.9	9.9	564	6.3	6.3	62	42.4	42.4
2	157	19.8	9.9	131	15.8	7.9	26	40.4	20.2
3 or over	41	25.6	7.6	20	15.1	4.2	21	34.3	10.9
1930									
Total	1,019	12.5	9.4	845	6.3	5.2	174	42.7	22.7
1	767	8.2	8.2	711	5.2	5.2	56	46.6	46.6
2	187	26.0	13.0	97	11.0	5.5	90	42.0	21.0
3 or over	65	24.1	7.4	37	14.7	4.5	28	36.7	11.3

1931									
Total	1,101	12.6	9.4	883	6.7	5.4	218	41.6	16.2
1	736	5.7	5.7	728	5.3	5.3	8	43.6	43.6
2	262	30.2	15.1	109	12.4	6.2	153	43.0	21.5
3 or over	103	27.8	8.5	46	15.3	4.6	57	37.8	11.7
1932									
Total	964	14.0	10.0	751	6.1	4.8	213	41.8	22.3
1	727	10.7	10.7	621	4.7	4.7	106	46.0	46.0
2	147	22.0	11.0	91	11.2	5.6	56	39.6	19.8
3 or over	90	27.6	7.7	39	14.4	4.1	51	37.6	10.3
1933									
Total	930	12.6	7.8	738	6.9	4.6	192	34.5	14.7
1	491	5.1	5.1	461	4.4	4.4	10	35.0	35.0
2	331	19.2	9.6	217	10.4	5.2	114	36.2	18.1
3 or over	108	26.7	6.1	40	15.2	4.5	68	33.8	10.4
1934									
Total	1,084	16.8	9.3	776	7.6	5.3	308	40.2	14.4
1	572	7.5	7.6	543	5.5	5.5	29	44.7	44.7
2	248	21.6	10.8	166	11.6	5.8	82	42.0	21.0
3 or over	264	32.5	9.6	67	14.0	4.1	197	38.6	11.4
1935									
Total	1,192	14.8	9.2	902	6.8	5.0	290	40.1	16.6
1	756	8.1	8.1	695	5.2	5.2	61	41.8	41.8
2	297	27.6	13.8	135	10.6	5.3	162	42.2	21.1
3 or over	139	24.2	5.8	72	15.6	4.3	67	33.6	7.1
1936									
Total	1,116	14.3	10.3	884	6.8	5.1	234	42.5	26.5
1	809	11.7	11.7	682	5.3	5.3	127	46.3	46.3
2	219	21.4	10.7	138	10.8	5.4	81	39.4	19.7
3 or over	90	20.0	5.8	64	14.7	4.2	26	36.1	11.4

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 86, fn. 11 for method of determining weeks with work. ^bBase too small for calculation.

Table A-25.- AVERAGE NUMBER OF WEEKS WITH WORK FOR ALL PERSONS WHO WORKED AT INDIVIDUAL SHOPS,
BY OCCUPATIONAL GROUP, 1926-36^a

Year	All workers		Weavers		Other skilled		Semiskilled	
	Number	Average number of weeks with work	Number	Average number of weeks with work	Number	Average number of weeks with work	Number	Average number of weeks with work
1926	120	22.7	84	22.8	17	20.6	19	24.2
1927	139	19.0	98	19.3	19	16.4	23	19.5
1928	255	15.5	153	16.6	33	19.0	69	11.1
1929	824	12.6	537	13.3	89	14.7	198	9.5
1930	1,019	12.5	683	12.5	113	14.5	223	11.4
1931	1,101	13.6	706	14.1	166	12.4	229	12.8
1932	964	14.0	599	15.1	153	13.3	212	11.6
1933	930	12.6	637	12.7	136	12.8	157	12.1
1934	1,064	16.8	708	16.2	161	15.1	215	13.6
1935	1,192	14.9	859	15.0	146	14.5	165	15.0
1936	1,118	14.3	799	13.6	115	18.7	204	14.6

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 66, fn. 11 for method of determining weeks with work.

Table A-26.- PERCENTAGE DISTRIBUTION OF TOTAL NUMBER OF WEEKS WITH WORK ON DAY AND NIGHT SHIFT FOR ALL PERSONS WHO WORKED AT INDIVIDUAL SHOPS, BY OCCUPATIONAL GROUP, 1926-36^a

Year	All workers			Weavers			Other skilled			Semiskilled		
	Total	Day	Night	Total	Day	Night	Total	Day	Night	Total	Day	Night
1926	100.0	100.0	-	100.0	100.0	-	100.0	100.0	-	100.0	100.0	-
1927	100.0	95.4	4.6	100.0	95.2	4.8	100.0	94.6	5.4	100.0	96.7	3.3
1928	100.0	82.4	17.6	100.0	76.7	23.3	100.0	99.7	0.3	100.0	87.3	12.7
1929	100.0	93.4	6.6	100.0	91.4	8.6	100.0	98.9	1.1	100.0	96.8	3.2
1930	100.0	89.0	11.0	100.0	87.1	12.9	100.0	91.3	8.7	100.0	93.8	6.2
1931	100.0	91.2	8.8	100.0	89.1	10.9	100.0	95.2	4.8	100.0	95.6	4.4
1932	100.0	87.2	12.8	100.0	85.7	14.3	100.0	89.4	10.6	100.0	90.9	9.1
1933	100.0	81.8	18.2	100.0	78.3	21.7	100.0	88.4	11.6	100.0	91.0	9.0
1934	100.0	76.7	23.3	100.0	72.4	27.6	100.0	85.8	14.2	100.0	88.3	11.7
1935	100.0	78.4	21.6	100.0	74.9	25.1	100.0	84.6	15.4	100.0	89.9	10.1
1936	100.0	84.7	15.3	100.0	81.0	19.0	100.0	91.8	8.2	100.0	93.3	6.7

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops. See p. 66, fn. 11 for method of determining weeks with work.

Table A-27.- PERCENTAGE DISTRIBUTION OF ALL PERSONS WHO WORKED AT INDIVIDUAL SHOPS,
BY OCCUPATIONAL GROUP AND SHIFT, 1926-36^a

Year	All workers				Weavers				Other skilled				Semiskilled			
	Total	Day	Day and night ^b	Night	Total	Day	Day and night ^b	Night	Total	Day	Day and night ^b	Night	Total	Day	Day and night ^b	Night
1926	100.0	100.0	-	-	100.0	100.0	-	-	100.0	100.0	-	-	100.0	100.0	-	-
1927	100.0	85.7	1.4	12.9	100.0	84.7	2.0	13.3	100.0	88.9	-	11.1	100.0	87.0	-	13.0
1928	100.0	84.7	0.4	14.9	100.0	77.7	0.7	21.6	100.0	97.0	-	3.0	100.0	94.2	-	5.8
1929	100.0	86.0	7.0	7.0	100.0	82.7	10.4	6.9	100.0	97.8	-	2.2	100.0	89.4	1.0	9.6
1930	100.0	71.5	10.1	18.4	100.0	63.1	11.9	25.8	100.0	84.1	12.4	3.5	100.0	90.6	5.4	4.0
1931	100.0	74.7	9.4	15.9	100.0	65.0	11.8	23.2	100.0	90.4	6.6	3.0	100.0	93.5	3.9	2.6
1932	100.0	68.9	12.9	18.2	100.0	60.3	15.2	24.5	100.0	83.0	11.8	5.2	100.0	83.0	7.1	9.9
1933	100.0	62.9	12.9	24.2	100.0	53.8	15.1	31.1	100.0	86.8	8.8	4.4	100.0	79.0	7.6	13.4
1934	100.0	63.0	13.7	23.3	100.0	56.5	15.0	28.5	100.0	71.5	13.0	15.5	100.0	78.1	9.8	12.1
1935	100.0	57.5	13.2	29.3	100.0	50.1	13.2	36.7	100.0	70.9	14.2	14.9	100.0	81.1	12.4	6.5
1936	100.0	60.9	10.3	28.8	100.0	50.4	10.8	38.8	100.0	81.7	11.3	7.0	100.0	90.2	7.8	2.0

^aData obtained in NRP Field Survey: pay-roll sample for 22 shops.

^bWorkers employed on both day and night shift, although not necessarily at the same time.

Table A-26.- USUAL INDUSTRY AND OCCUPATION OF BROAD-SILK WORKERS, 1986^a

Usual industry and occupation ^b	Total		Men		Women	
	Number	Percent of broad silk	Number	Percent of broad silk	Number	Percent of broad silk
Total	616	-	478	-	138	-
Broad silk	578	100.0	450	100.0	128	100.0
Warper	50	8.7	45	10.0	5	3.9
Twister	23	4.0	23	5.1	0	-
Enterer	4	0.7	4	0.9	0	-
Loom fixer	35	6.0	35	7.8	0	-
Weaver	395	68.3	337	74.9	58	45.3
Quiller and winder	60	10.4	0	-	60	46.9
Picker	4	0.7	0	-	4	3.1
Other	7	1.2	6	1.3	1	0.8
Other textile	32	-	25	-	7	-
Warper	2	-	2	-	0	-
Twister	2	-	2	-	0	-
Loom fixer	3	-	3	-	0	-
Weaver	17	-	16	-	1	-
Quiller and winder	6	-	0	-	6	-
Other	2	-	2	-	0	-
Other industry	6	-	3	-	3	-

^aData obtained in NRP Field Survey: occupational-history schedule.

^bSee p. 53, fn. 2 for definition of usual industry and occupation.

Table A-29.- DISTRIBUTION OF ALL FIRST ACCESSIONS, BY LENGTH OF CONNECTION
WITH INDIVIDUAL ESTABLISHMENT, 1926-36^a

Length of connection	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
	Number										
Total	120	126	585	523	693	702	578	541	592	654	617
½ year or less	48 ^b	69 ^c	359 ^d	339 ^e	522 ^f	513 ^g	490 ^h	382 ⁱ	418 ^j	514 ^k	562 ^l
Over ½ to 1 year	12	17	59	37	55	41	34	38	51	60	55
Over 1 year	60	40	168	147	116	148	114	121	122	80	-
1-2	7	12	61	53	41	41	31	46	64	80	-
2-3	11	5	34	24	16	16	25	32	59	-	-
3-4	4	9	11	14	10	19	18	41	-	-	-
4-5	3	1	13	6	9	28	40	-	-	-	-
5-6	5	-	7	4	13	44	-	-	-	-	-
6-7	2	4	15	9	28	-	-	-	-	-	-
7-8	4	4	10	37	-	-	-	-	-	-	-
8-9	1	3	17	-	-	-	-	-	-	-	-
9-10	7	2	-	-	-	-	-	-	-	-	-
10-11	16	-	-	-	-	-	-	-	-	-	-
	Percent										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
½ year or less	40.0	54.8	61.3	64.8	75.3	73.1	74.4	70.6	70.6	78.6	91.1
Over ½ to 1 year	10.0	13.5	10.0	7.1	7.9	5.8	5.9	7.0	8.6	9.2	8.9
Over 1 year	50.0	31.7	28.7	28.1	16.8	21.1	19.7	22.4	20.8	12.2	-
1-2	5.8	9.5	10.4	10.1	5.9	5.8	5.4	8.9	10.8	12.2	-
2-3	9.2	3.9	5.8	4.6	2.3	2.3	4.3	5.9	9.8	-	-
3-4	3.3	7.1	1.9	2.7	1.4	2.7	3.1	7.6	-	-	-
4-5	2.5	0.8	2.2	1.1	1.2	4.0	6.9	-	-	-	-
5-6	4.2	-	1.2	0.8	1.9	6.3	-	-	-	-	-
6-7	1.7	3.2	2.6	1.7	4.1	-	-	-	-	-	-
7-8	3.3	3.2	1.7	7.1	-	-	-	-	-	-	-
8-9	0.8	2.4	2.9	-	-	-	-	-	-	-	-
9-10	5.8	1.6	-	-	-	-	-	-	-	-	-
10-11	13.4	-	-	-	-	-	-	-	-	-	-

^aData obtained in NRP Field Survey; pay-roll sample for 22 shops.

^b44 (26.7 percent) had one employment period.

^c66 (49.2 percent) had one employment period.

^d202 (51.8 percent) had one employment period.

^e201 (57.8 percent) had one employment period.

^f475 (88.6 percent) had one employment period.

^g478 (68.1 percent) had one employment period.

^h397 (68.7 percent) had one employment period.

ⁱ328 (60.6 percent) had one employment period.

^j348 (58.8 percent) had one employment period.

^k443 (67.7 percent) had one employment period.

^l501 (81.2 percent) had one employment period.

Table A-30.- DISTRIBUTION OF ALL FIRST ACCESSIONS TO THE DAY SHIFT, BY LENGTH OF CONNECTION WITH INDIVIDUAL ESTABLISHMENT, 1926-36^a

Length of connection	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
	Number										
Total	120	109	488	485	511	545	415	338	385	357	352
½ year or less	48 ^b	53 ^c	275 ^d	302 ^e	357 ^f	385 ^g	291 ^h	209 ⁱ	244 ^j	253 ^k	308 ^l
Over ½ to 1 year	12	17	55	37	45	39	29	27	39	37	44
Over 1 year	60	39	158	146	109	142	95	102	103	67	-
1-2	7	12	55	53	37	39	20	38	48	67	-
2-3	11	5	33	24	16	15	23	26	55	-	-
3-4	4	9	10	14	10	17	16	36	-	-	-
4-5	3	1	13	6	8	27	36	-	-	-	-
5-6	5	-	7	4	10	44	-	-	-	-	-
6-7	2	3	13	8	28	-	-	-	-	-	-
7-8	4	4	10	37	-	-	-	-	-	-	-
8-9	1	3	17	-	-	-	-	-	-	-	-
9-10	7	2	-	-	-	-	-	-	-	-	-
10-11	16	-	-	-	-	-	-	-	-	-	-
	Percent										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
½ year or less	40.0	48.6	56.3	62.3	69.9	66.9	70.1	61.9	63.4	70.9	87.5
Over ½ to 1 year	10.0	15.6	11.3	7.6	8.8	7.1	7.0	8.0	9.6	10.3	12.5
Over 1 year	50.0	35.8	32.4	30.1	21.3	26.0	22.9	30.1	26.8	18.8	-
1-2	5.8	11.0	11.3	10.9	7.2	7.1	4.8	11.2	12.5	18.8	-
2-3	9.2	4.6	6.8	5.0	3.1	2.7	5.5	7.7	14.3	-	-
3-4	3.3	6.2	2.0	2.9	1.9	3.1	3.9	11.2	-	-	-
4-5	2.5	0.9	2.7	1.2	1.6	5.0	8.7	-	-	-	-
5-6	4.2	-	1.4	0.8	2.0	8.1	-	-	-	-	-
6-7	1.7	2.8	2.7	1.7	5.5	-	-	-	-	-	-
7-8	3.3	3.7	2.0	7.6	-	-	-	-	-	-	-
8-9	0.8	2.8	3.5	-	-	-	-	-	-	-	-
9-10	5.8	1.8	-	-	-	-	-	-	-	-	-
10-11	13.4	-	-	-	-	-	-	-	-	-	-

^aData obtained in WPA Field Survey; pay-roll sample for 22 shops.

^b44 (36.7 percent) had one employment period.

^c49 (48.0 percent) had one employment period.

^d222 (45.9 percent) had one employment period.

^e284 (58.4 percent) had one employment period.

^f317 (62.0 percent) had one employment period.

^g338 (61.9 percent) had one employment period.

^h251 (60.0 percent) had one employment period.

ⁱ175 (51.8 percent) had one employment period.

^j200 (51.9 percent) had one employment period.

^k205 (57.4 percent) had one employment period.

^l265 (75.8 percent) had one employment period.

Table A-21.- AVERAGE WEEKLY EARNINGS OF ALL PERSONS WHO WORKED AT INDIVIDUAL SHOPS,
BY MONTH AND YEAR, 1926-36^a

(Dollars)

Year	Yearly	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1926	25.88	25.97	26.43	26.05	25.29	25.73	24.61	24.28	22.23	21.99	29.69	25.72	26.06
1927	26.22	23.88	29.94	31.72	26.73	25.29	22.74	24.45	28.95	25.28	27.49	23.32	26.06
1928	23.98	26.25	23.61	26.49	23.76	24.52	25.60	20.71	22.41	29.67	20.08	21.61	24.41
1929	26.75	26.84	34.34	31.90	25.95	27.88	23.90	23.96	25.03	23.91	23.05	24.92	23.87
1930	24.30	21.27	24.72	26.61	26.81	24.29	21.41	17.66	21.74	22.71	26.71	25.21	26.07
1931	22.14	25.35	26.50	24.30	24.77	21.52	18.98	20.60	10.17	17.51	21.46	19.77	20.08
1932	15.91	17.56	20.37	18.93	18.23	16.67	13.37	13.24	11.99	15.65	14.87	16.21	13.64
1933	13.55	14.02	13.82	11.56	13.93	15.01	14.68	14.21	15.11	7.46	3.36	14.67	14.94
1934	14.76	17.17	17.90	16.06	15.33	9.77	14.88	11.26	14.31	9.93	16.24	15.38	14.59
1935	14.35	15.13	14.03	14.44	15.46	13.73	13.54	12.55	14.73	14.51	15.79	12.94	14.60
1936	13.38	13.34	15.02	13.23	12.41	12.78	13.00	12.48	13.12	13.73	14.83	12.46	13.81

^aData obtained in NRP Field Survey: pay-roll sample for 19 of 22 shops.

Table A-22.- DISTRIBUTION OF ALL PERSONS WHO WORKED AT
INDIVIDUAL SHOPS, BY AMOUNTS RECEIVED
DURING YEAR, 1926-26^a

Year	Total		Amounts received (dollars)					
	Number	Percent	Less than 11	11-50	51-100	101-500	501-1,000	1,001 or over
1926	95	100.0	3.1	13.7	11.8	38.9	18.9	13.8
1927	118	100.0	12.7	22.1	10.2	24.6	17.0	13.4
1928	233	100.0	10.7	17.2	14.2	34.7	13.7	9.5
1929	757	100.0	11.5	20.1	11.2	30.2	19.2	7.8
1930	958	100.0	15.0	20.0	12.8	31.1	11.2	9.9
1931	1,044	100.0	14.5	21.2	13.4	25.7	15.1	10.1
1932	859	100.0	19.7	24.3	9.4	26.2	15.8	4.6
1933	755	100.0	15.4	20.6	12.1	35.7	13.6	2.6
1934	941	100.0	12.4	20.8	9.9	31.0	23.0	2.9
1935	1,047	100.0	20.8	19.7	11.9	28.4	16.2	3.0
1936	949	100.0	17.9	22.1	13.5	27.8	15.7	3.0

^aData obtained in NRP Field Survey: pay-roll sample for 19 of 22 shops.

Table A-23.- MEDIAN EARNINGS RECEIVED DURING YEAR FOR ALL
WORKERS, BY NUMBER OF WEEKS ON INDIVIDUAL PAY ROLLS,
1926-36^a

(Dollars)

Year	All workers	Number of weeks on pay roll			
		1-16	17-32	33-48	49-52
1926	232.65	103.00	475.50 ^b	900.50 ^b	1,258.83 ^b
1927	138.00	49.50	575.50 ^b	1,150.00 ^b	1,138.00 ^b
1928	138.00	73.50	520.50	885.50	1,575.50 ^b
1929	153.00	67.50	665.50	990.50	1,140.50
1930	118.00	60.50	518.00	1,025.50	1,325.50
1931	105.50	47.50	525.50	1,000.50	1,050.50
1932	81.50	26.50	340.50	645.50	653.00
1933	110.50	38.50	350.50	550.50	(c)
1934	145.50	37.50	320.50	670.50	733.00
1935	90.70	26.50	325.50	700.50	825.50 ^b
1936	83.50	30.00	245.50	548.50	795.50

^aData obtained in NRP Field Survey: pay-roll sample for 19 of 22 shops.

^bMedian based on less than 25 but more than 10 workers.

^cNo persons in this group.

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