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**LABOR RELATIONS IN THE LACE
AND LACE-CURTAIN INDUSTRIES
IN THE UNITED STATES**

By GLADYS LOUISE PALMER



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PREFACE

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GLADYS LOUISE PALMER.

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Chapter I.—RISE OF MACHINE-MADE LACE INDUSTRY IN EUROPE¹

DEFINITION OF "LACE"

"Lace" may be defined as ornamental openwork, formed by the intertwisting of threads, either by hand or by machine, to make a pattern, ornament and fabric being made simultaneously. This definition excludes embroidery fabrics—where the holes in the fabric have been cut out or burned out—which are sold commercially as "lace."

Machine-made laces are classified according to the type of machine on which they are produced:

(1) So-called "fancy laces" (or more commonly "laces") which are narrow edgings and insertions like Valenciennes, Cluny, and torchons, and wider laces, flouncings, veilings, and fine nets used for dress materials and house-furnishing purposes, made on the Levers lace machine.

(2) "Plain nets" or bobbin nets made on the bobbin-net machine.

(3) Window curtains, coarse nets, bedspreads, panels, table covers, and similar products made on the Nottingham lace-curtain machine.

Following the customary classification in the machine-made lace industry, Barmen "laces" made on a braiding machine will be excluded from this study.

INVENTIONS LEADING TO THE MAKING OF LACE BY MACHINERY

Machine-made laces are produced in imitation of all the familiar hand-made laces, such as Valenciennes, Cluny, Chantilly, and Russian filet. Successful imitations, by the use of machinery, of the varied and beautiful patterns of hand-made lace which were the product of centuries of skill, patient labor, and national artistic taste, were made possible only as the result of many years of experimental work and a number of ingenious inventions. The first machine for making lace was a modification of Lee's stocking frame, made by Strutt and Frost in Nottingham in 1764. However, the net made by this machine raveled, and for a period of 50 years—from 1760 to 1810—many efforts were made, by mechanical adaptations of the hosiery frame, to obtain a "fast" mesh. All of the

¹ Except where otherwise noted, data in this chapter are from Felkin, William: *History of the Machine-Wrought Hosiery and Lace Manufacture*. Cambridge, England, W. Metcalfe, 1867.

improvements on machines that were made during this and a later period were the work of framework knitters, fixers, and setters-up on frameworks and bobbin-net frames. Nottingham, which was the center of the hosiery industry, became the rallying point of lace-machine inventors, and, shortly, the center of the lace industry. By 1769 Frost, who had first made lace, was able to make figured net and by 1779 produced a square-meshed net which did not ravel. The second development in lace machinery was known as the warp frame, each warp thread having an individual needle which looped the thread first to the right and then to the left. By 1800 this machine produced both plain and figured net.

The products of these inventions, known as point net and warp net, both fashioned by the looping of threads, were made extensively during this period; but up to this time no invention had successfully produced a meshed net, in imitation of the hand-made pillow or bobbin lace, for which Belgium had become famous. This was accomplished by Robert Brown in the making of fishing nets in 1803, and later, in 1809, by John Heathcoat on his bobbin-net machine, which made a perfect hexagonal mesh like that of pillow lace. To accomplish this a device for plaiting, twisting, or traversing the threads was necessary, and in Heathcoat's machine swinging bobbins traversed vertical warp threads and twisted them together to form a mesh; this machine has been called "the most expensive and complex apparatus in the whole range of textile mechanism," and it remains in principle the basis of modern lace machines.

Improvements on the bobbin-net frame were made by a number of frame smiths, the most important of whom was John Levers (modern spelling of Leavers), for whom the Levers machines have been named. He doubled the number of bobbins used on Heathcoat's machine and put them all in one tier; his machine was made from 5 to 15 points in fineness of gauge.² Somewhat later Draper took out patents for the application of the Jacquard apparatus to the lace frame, whereby great variety of patterns could be introduced; and in 1849 Oldham added the use of thin steel bars for the guidance of the threads in the Levers machine. It is on this improved machine that the successful imitations of Valenciennes, Irish, Chantilly, Spanish, and such laces are made. So successfully is this done that it is sometimes impossible for even a trained eye to detect the difference between fine grades of machine-made lace and hand-made lace of certain patterns. Other improvements followed, until it was possible to make wide lace curtains with elaborate patterns as well as narrow laces of very fine mesh with simple or intricate patterns.³

EARLY LABOR DIFFICULTIES AMONG LACE WORKERS

Heathcoat's invention of the bobbin-net machine came at a time when hand-made net was practically extinct, and laces made on his machine were manufactured in large quantities as a basis for hand-made motifs. A serious break in this prosperous period occurred however, in the Nottingham district between 1811 and 1816, when

² Point, count, or gauge on a lace machine refers to the number of bobbins that pass to and fro in an inch of combs along the width of the machine.

³ Felkin, William: *Hosiery and Lace in British Manufacturing Industries*. London, Edward Stanford, 1876, pp. 8-86.

many bobbin-net frames were broken by unemployed framework knitters and the point-net and warp-net workmen displaced by Heathcoat's invention. In 1816 a reduction in wages at Heathcoat's factory in Loughborough was followed by a most serious outbreak.⁴ By 1823 water or steam power began to be used in the production of lace, and the period 1823-1825 was one of unparalleled prosperity for the Nottingham lace trade. In anticipation of the expiration of Heathcoat's patents, large amounts of capital were poured into Nottingham and workers came from all over England. Engineers from Birmingham, Sheffield, and Manchester thronged to Nottingham and contracted to make bobbin net machines, Levers machines, and brass bobbins, many of which were never put into working order before the depression of 1831 threw most of the workers in the industry out of employment. It is estimated that by 1833 the number of lace machines in Nottingham and outlying districts had reached 5,000, of which 3,900 were hand machines and 1,100 were power machines.

Felkin, the famous historian of the machine-made lace industry who wrote in 1867, says of this period:

Forty years ago the machinery of the bobbin-net trade was to a large extent in the hands of more than a thousand small owners, chiefly handicraftsmen, most of whom were unused to business, and of course, practically unacquainted with the principles on which it should be conducted. These employed some hundreds of agents in the disposal of the produce of their machines who carried their goods in large packs daily for sale at the warehouses (p. 552).

The industrial depressions, particularly those of 1831, 1837, and 1848, severely affected the lace industry. During the panic of 1837, half of the hosiery machinery and more than half of the lace machinery ceased operation, and some 4,400 lace and stocking makers, representing, with their families, about half of the inhabitants of Nottingham, had to be supported by a relief fund. With each period of stagnation in the industry, attempts were made to reduce the excessively long working-day which seems to have been prevalent in the industry from its inception. Thus, according to Felkin:

In 1831, a stint to 8 hours' daily labor was nominally agreed upon, but after a fortnight's trial, ceased; the journeymen declined for a time to return to more than 12 hours' labor, and resolved to form a lace makers' union. * * * In 1832, a short stint was carried into effect by the conjoint efforts of masters and workmen. * * * The journeymen put forth a "regulated" list of wages amounting to 100 per cent advance; this being refused, some windows were broken in Carrington (p. 343).

And again, at a later period:

In 1846, a public meeting was held of 2,000 lace hands, half of whom were partially employed, the other half altogether out of work. They prayed the House of Commons to restrict the working time to 16 hours, and 2 shifts a day. This petition was also signed by 430 small machine owners; 27 of the larger owners petitioned against it; and the bill was negatived by about 130 to 50. * * * This was succeeded by the formation of the existing bobbin-net workmen's union (p. 378).

From these glimpses of labor history we can reconstruct the breakdown of the handicrafts industry and the development of the factory system with its attendant period of chaotic labor conditions, the recurring industrial depressions, and the disorganized attempts of

⁴ Hammond, J. L. and Barbara: *The Skilled Labourer, 1760-1832*. London, Longmans & Co., 1920, pp. 237-242.

the workers to shorten the working-day and regulate wages, first through local organizations and later through an effort to influence parliamentary legislation, and with the failure of this, the culmination of the movement in the formation of one of the oldest trade-unions in Great Britain—a union which is still functioning. The successful collective bargaining of this craft union has been the background of the American lace workers' labor organization.

The Amalgamated Society of Operative Lacemakers, as the Nottingham union is called, has become an important feature in the Nottingham lace industry because for a long time its membership included over 90 per cent of the lace makers employed in the city.⁵ The lace makers, often called "twist hands" from the twisting of the threads in the lace loom, are, with the exception of the designers, the most highly skilled group in the industry. Yet they are in a minority as compared with the larger number of semiskilled and unskilled workers employed. According to the 1907 census of production, the latest official figures available on industry in Great Britain, there were 36,840 employees in the British lace industry, of whom 20,459 were women.⁶ Of the men employed only 3,000 were "lace makers."⁶ The number of employees in the industry has apparently decreased by about 25 per cent since that time, for an estimate made by the Ministry of Labor of the number of insured lace workers in Nottingham in 1922, indicates that there were only 27,890 workers of whom 16,780 were women.⁷ The membership of the Amalgamated Society of Lace Operatives is given in the Yearbook of the International Federation of Trade-Unions for 1922 (p. 47), as 2,527 men, obviously including only the skilled lace makers.

The economic importance of the Nottingham union is attested by an outside observer in these words: "Since the independence and jealousy of the manufacturers prevent their having any similar alliance except temporarily, the union usually dominates the situation."⁸ Employers contend that trade-union restrictions and demands drove the lace industry out of Nottingham into outlying suburbs such as Derby, Long Eaton, and Sandiacre, and to the region around Glasgow, Scotland, citing the unions' attempt to control the length of machine to be worked,⁹ and a controversy over a wage scale in the nineties, when the Nottingham Chamber of Commerce allowed the lace-machine builders to break their agreement not to permit machines to be taken out of Nottingham. During this period the major operations of the lace industry were moved out of Nottingham, and lace-curtain machines were exported to United States in large numbers, and also to Scotland, Poland, and Russia.

⁵ United States. Department of Commerce and Labor. Bureau of Manufactures. Lace industry in England and France, by W. A. Graham Clark. Washington, 1909, p. 34.

⁶ Great Britain. Census of Production Office. Census of production (1907), London, 1909-11, p. 362, Table III; Great Britain, Board of Trade, Report on textile trades after the war (Cd. 9070), London, 1918, p. 98; and Great Britain, Board of Trade, Report on collective agreements between employers and workpeople in the United Kingdom (Cd. 5366), London, 1910, p. 200.

⁷ Great Britain. Board of Trade. Lace Embroidery and Silk Industries Committee. Interim report. London, 1923, p. 23.

⁸ United States. Department of Commerce and Labor. Bureau of Manufactures. Lace industry in England and France, by W. A. Graham Clark. Washington, 1909, p. 33.

⁹ Great Britain. Board of Trade. Report on textile trades after the war. (Cd. 9070.) London, 1918, p. 99.

PRESENT STATUS OF NOTTINGHAM LACE INDUSTRY

Scotland now produces as great a quantity of lace curtains as Nottingham;¹⁰ while the French have become famous for their fine-grade fancy laces, and Calais now rivals Nottingham as a European lace center. However, Nottingham still maintains the lead in the manufacture of cheaper grades of lace and remains the commercial center of the British lace industry. Lace products are shipped there from outside factories to be bleached, dyed, dressed, and finished before being exported. The city exports about 80 per cent of its total product, principally to the United States, the overseas Dominions, and the Continent.¹¹ Since the lace-curtain industry has become established in the United States, British exports of that commodity go mainly to the Netherlands, Belgium, South America, and the Dominions.¹² In the first nine months of 1923, Great Britain exported £1,640,529¹³ worth of cotton laces and nets and £18,323 worth of silk and mixed silk laces and nets.¹⁴

There are two unusual features in the English lace industry which are worth noting. The first is the number of small operators who rent machines from the machine builders, and rent floor space or "standings", as they term it, including power and heat. Although there are a few large lace and lace-curtain factories, the majority of the shops are small.¹⁵ The second unusual feature is the fact that, with few exceptions, all producers manufacture "in the gray", and then send their product to outside bleachers and finishers. In this way, the warehouseman becomes a commission man ordering patterns and designating to what bleacher the goods are to go, and is therefore an all-important link in the distributing chain. Somewhat similar conditions are found in the French lace industry, but are not characteristic of the American industry.

PRESENT STATUS OF FRENCH LACE INDUSTRY

The rise of Calais as the center of the French lace industry is also an interesting chapter in industrial history. Northern France and Belgium had been the centers of the hand-made lace industry for many years. Open-work webs had been produced on the hosiery frames in France, and many attempts had been made to learn about the Nottingham inventions for making lace, between 1765 and 1815. However, strict laws with heavy penalties were in force in England against the export of machinery and the "enticing of artificers" from the Kingdom. France retaliated by forbidding the importation of English lace or machinery.¹⁶ But Cutts, who had been an employee of Heathcoat at Loughborough, succeeded in smuggling the first machine into France in 1815, and this was finally set up at

¹⁰ Great Britain. Board of Trade. Report on earnings and hours of labor in the textile trades in the United Kingdom in 1906. (Cd. 4545.) London, 1909, p. LXVIII.

¹¹ Great Britain. Board of Trade. Report on textile trades after the war. (Cd. 9070.) London, 1918, p. 95.

¹² *Ibid.*, p. 97.

¹³ Pound at par—\$4.8665; exchange rate varies.

¹⁴ Great Britain. Commercial Labor and Statistical Department. Accounts relating to trade and navigation. London, July-December, 1923.

¹⁵ United States. Department of Commerce and Labor. Bureau of Manufactures. *Lace industry in England and France*, by W. A. Graham Clark. Washington, 1909, p. 10.

¹⁶ Dietrich, Bernard: *Die Spitzenindustrie in Belgien und Frankreich zu Ende des XIX Jahrhunderts*. Leipzig, Von Duncker & Humblot, 1900, p. 34.

Douay. In 1816 a lace machine was smuggled into Calais, and this opened the way for a considerable export of machinery, and later an extensive emigration of English bobbin net workmen to Calais, Lisle, Cambrai, and other towns of northern France. In Calais the industry settled in the suburbs, as it had to a large extent around Nottingham, especially in St. Pierre-de-Calais which has since become a famous center of lace manufacture. Other centers are found at Caudry, St. Quentin, St. Chamond, Lille, and Lyons.

The industry centering in Calais grew rapidly, and it is estimated that at the end of 1923 there were 2,648 lace machines, 409 employers engaged in the manufacture of lace, and a total of 31,752 factory and warehouse employees of whom about two-thirds were women.¹⁷ The highly skilled "twist hands" or "tullistes" as they are called in France, numbered approximately 7,700 of the total number of factory employees at an earlier date, and about half of them were organized into labor unions.¹⁸ They, like the English "twist hands" are highly paid pieceworkers, receiving higher rates than any other group of textile workers.¹⁹

The Calais Chamber of Commerce maintains a conditioning hall for testing and storing silk and cotton yarns for the trade. As in England, there are many small producers who rent machines, floor space, heat and power, and often obtain their designs from commercial designers or from central bureaus of designs.²⁰ At both Calais and Nottingham there are special training schools for instruction in lace designing. Calais producers likewise send their product to outside bleachers, dyers, and finishers, and the bulk of the product is sold through commission houses.²¹

Although many of the French manufacturers and workers are of English descent, the superior taste and adaptiveness of the French has led them to specialize in the finer grades of fancy laces, such as Valenciennes, malines, Chantilly, and all silk laces. This tendency is analogous to the specialization in articles of luxurious consumption in other French textile industries. France exports laces to all parts of the world, although the United States and Great Britain form two of her best export markets. The official figures of exports from France in the first 11 months of 1923 indicate that cotton nets and laces to the value of 120,829,000 francs, and silk and other laces and nets to the value of 97,107,000 francs were shipped from French ports.²²

¹⁷ Figures obtained by correspondence with the secretary of the Calais Chamber of Commerce.

¹⁸ United States, Department of Commerce and Labor, Bureau of Manufactures, *Lace Industry in England and France*, by W. A. Graham Clark, Washington, 1909, p. 43; and *Étude sur l'Industrie des Tulle et Dentelles mécaniques de Calais*, by R. Bouffartigue, Tours, Deslis Frères, 1903, p. 98.

¹⁹ United States, Department of Commerce and Labor, Bureau of Manufactures, *Lace Industry in England and France*, by W. A. Graham Clark, Washington, 1909, p. 42; and Great Britain, Board of Trade, *Report on earnings and hours of labor in the textile trades in the United Kingdom in 1906* (Cd. 4545), London, 1909, p. XV.

²⁰ *Die Spitzenindustrie in Belgien und Frankreich zu Ende des XIX. Jahrhunderts*, by Bernard Dietrich, Leipzig, Von Duncker & Humblot, 1900, p. 54; and *Étude sur l'Industrie des Tulle et Dentelles mécaniques de Calais*, by R. Bouffartigue, Tours, Deslis Frères, 1903, pp. 33, 34.

²¹ United States, Department of Commerce and Labor, Bureau of Manufactures, *Lace Industry in England and France*, by W. A. Graham Clark, Washington, 1909, p. 41; and *Die Spitzenindustrie in Belgien und Frankreich zu Ende des XIX. Jahrhunderts*, by Bernard Dietrich, Leipzig, Von Duncker & Humblot, 1900, p. 51.

²² France, Direction Générale des Douanes. *Documents statistique sur le Commerce de la France*. Paris, November, 1923.

COMPARATIVE SIZE OF EUROPEAN AND AMERICAN LACE INDUSTRIES

France and England still maintain the lead in the manufacture of machine-made laces, although there are scattered industries throughout the world. It was estimated in 1914 that 79 per cent of the world's lace-curtain machines were in Europe, as compared with 21 per cent in this country.²³ An unpublished tentative estimate of 1923 raises the proportion of machines in the United States to 23 per cent.²⁴ On the other hand, it is estimated that only about 10 per cent of the world's Levers machines are in this country. It is evident from these figures that the American manufacturer has strong foreign competition particularly in the field of fancy laces. Most of the lace curtains used in this country are produced here, and less than one-half of one per cent of our product is exported;²⁵ but we import a greater amount of laces than we produce. Various estimates of the proportion of domestic manufactures of lace to the domestic consumption have been made, the figure ranging from 25 to 50 per cent with different bases of comparison. It is difficult to obtain an accurate figure, but with the most liberal estimate from the point of view of domestic producers, we probably import twice as many laces as we produce.²⁶

AMERICAN IMPORTS OF FOREIGN LACE PRODUCTS

Since the rise of the American lace-curtain industry in 1890, the imports of Nottingham lace curtains have steadily decreased. Both quantity and value of Nottingham lace-curtain imports have declined—from 1,679,659 square yards, valued at \$752,775, in 1898 to 163,325 square yards, valued at \$53,744, in 1922. With each change in the tariff schedules methods of collecting statistics on lace imports have changed, and as a result the figures are exceedingly difficult to interpret. Machine-made laces were not reported separately until 1912, and then only value of imports was given up to 1919. Since that time quantities imported have been stated, as well as values, but as laces were reported first in linear yards and later in pounds, and lace curtains are reported in square yards, the products may not be compared with each other. There was a slump in the imports of lace curtains during the war, and we are just now approximating our pre-war values; and our imports of machine-made laces are less than half our pre-war imports, as measured by value, uncorrected for a rising price level. However, there has been a shift of position in the countries from which we import. The largest imports of lace curtains are from Switzerland, but imports from England and France, especially the former, show a marked decrease. Scotland has practically lost our market, while

²³ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings on general tariff revision, Schedule N. Brief of American Lace Manufacturers' Association. Washington, 1921, p. 3362.

²⁴ United States. Tariff Commission. Preliminary report on lace. Washington, Dec. 1, 1923, pp. 10, 18. (Lace-curtain machines: Great Britain, 802; Continent, 909; United States, 518; World total, 2,229.)

²⁵ United States. Tariff Commission. Digest of tariff hearings before the Senate Committee on Finance on bill H. R. 7456. Washington, 1922, p. 366.

²⁶ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings [on tariff schedules], Vol. IV, Schedule J. Washington, 1913, pp. 3365 et seq. [H. Doc. No. 1447, 62d Cong., 3d sess.].

Japanese and German imports have shown a remarkable increase. In imports of machine-made laces (which include some lace other than the products of the Levers machine), France still maintains her historic lead, England's exports have steadily declined, Germany is gradually regaining what she lost during the war, and exports from Switzerland and China have noticeably increased.²⁷

Unfortunately, comparable figures are available for too short a period to indicate anything but temporary conditions rather than trends. It is evident, however, that the international trade in laces and lace products has been considerably upset since the war, the result of the unusual conditions of international exchange and of unsettled world economic factors. Great Britain has felt the competition of the other European countries in the export of lace products as well as other commodities, and the English lace industry is at the present time much depressed. English lace manufacturers have recently asked for protection against French laces under the safeguarding of industries act.²⁸ Since the war, cheaper hand-made laces and machine-made laces from the Orient have entered the world market, bidding for trade, and have met with considerable success. The flooding of the American market with cheap laces from Germany, France, Italy, and the Orient has had a considerable effect on tariff considerations in this country, and will be discussed more fully in the next chapter. On the whole, the conditions have been too chaotic to permit prediction as to new movements in the world market for lace products.

²⁷ See tables, Appendix, p. 78.

²⁸ United States. Department of Commerce. Bureau of Foreign and Domestic Commerce. Trade and Economic Review, No. 1, 1921, p. 19. (Supplement to Commerce Reports.)

Chapter II.—LACE AND LACE-CURTAIN INDUSTRIES IN THE UNITED STATES

In foreign usage, the general term "lace industry" includes the manufacture of all laces, lace curtains, veilings, and nets. United States census reports include under "cotton-lace industry," the manufacture of all laces, lace curtains, nets, and veilings made of cotton, linen, silk and cotton, artificial silk and cotton, mercerized cotton, silk and wool, or other combinations of textile yarns. The predominant material is cotton.

The Bureau of the Census has collected separate statistics on the domestic production of lace products only since 1914. The following table, compiled from the census figures, gives some idea of the size and development of the industry over a period of seven years:

TABLE 1.—GENERAL STATISTICS OF AMERICAN COTTON-LACE INDUSTRY, 1914, 1919, AND 1921

[Source: United States. Department of Commerce. Bureau of the Census. Biennial Census of Manufactures, 1921, p. 180]

Item	1914	1919	1921
Number of establishments.....	41	44	37
Persons engaged:			
Proprietors.....	10	8	14
Salaried workers.....	673	698	589
Wage earners.....	7,440	6,490	6,396
Total.....	8,123	7,196	6,999
Capital invested.....	\$20,956,509	\$32,260,216	-----
Pay roll:			
Salaries.....	1,210,976	2,024,441	\$2,016,456
Wages.....	3,468,061	6,066,557	6,206,992
Total.....	4,679,037	8,110,998	8,223,448
Cost of materials.....	5,676,948	13,075,994	11,321,446
Value of product.....	¹ 13,206,785	¹ 29,396,853	25,981,093
Value added by manufacture.....	7,529,837	16,320,859	14,659,647

¹ In addition, three establishments engaged primarily in other industries reported products valued at \$958,738.

² In addition, establishments engaged primarily in other industries reported products valued at \$2,025,790.

It is apparent from these figures that although between 1914 and 1921 the number of establishments and of employees in the cotton-lace industry decreased, the capital investment considerably increased, while the wage bill, the cost of raw materials, and the value of the product and value added by manufacture have all doubled. During the same period the general price level as reflected in the Bureau of Labor Statistics wholesale price index rose from 98 in 1914 (on 1913 as a base or 100) to 226 in 1920, and fell to 147 in 1921.¹

¹ Monthly Labor Review, December, 1923, p. 79.

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During the same period, the products of the cotton-lace industry were divided in the following way:

TABLE 2.—AMOUNT AND VALUE OF PRODUCTS OF COTTON-LACE INDUSTRY, 1914 1919, AND 1921

[Source: United States. Department of Commerce. Bureau of the Census. Biennial Census of Manufactures, 1921, p. 196]

Product	1914	1919	1921
Nottingham lace curtains:			
Pairs.....	5,591,154	3,933,493	3,915,412
Value.....	\$4,678,847	\$8,165,447	\$8,435,424
Nottingham lace-curtain nets:			
Linear yards.....	7,504,809	19,464,962	17,235,736
Value.....	\$1,258,307	\$7,616,339	\$6,785,333
Lavers laces:			
Square yards.....	7,236,934	11,629,123	4,452,625
Value.....	\$3,681,042	\$6,607,546	\$3,988,120
All other nets and laces: Value.....	\$2,902,857	\$4,744,243	\$6,630,662
All other products: Value.....	\$685,732	\$2,263,378	\$141,554

It is worth noting that the production of lace-curtain nets has more than doubled in this period, and that of Lavers laces has fallen off more than one-third. Both of these changes reflect style variations, and the latter reflects serious economic conditions in the Lavers industry as well. During this period Pennsylvania produced four-fifths of the lace-curtain and lace-curtain-net output of this country, and about one-half of the entire product of the cotton-lace industry, as measured by value, while Rhode Island manufactured about half of the Lavers laces.²

Data relative to the number and kinds of labor employed in the industry are difficult to secure. The most recent figures are those secured by the Bureau of the Census in 1919, of the number employed in various occupations and states on December 15, "or the nearest representative day."

TABLE 3.—NUMBER OF WAGE EARNERS IN COTTON-LACE INDUSTRY, ON DECEMBER 15, 1919, OR NEAREST REPRESENTATIVE DAY, BY OCCUPATION

[Source: United States. Department of Commerce. Bureau of the Census. Fourteenth Census, 1920. Census of Manufactures—Reports for selected industries (Vol. X), p. 184]

Class of worker	Con-necticut	New Jersey	New York	Penn-sylvania	Rhode Island	All other	Total
Spinners, frame.....				28			28
Lace weavers.....	137	69	24	117	350	63	760
Lace-curtain weavers.....	19		109	398		32	558
All other workers.....	669	175	824	3,032	815	590	6,096
Total.....	815	244	957	3,575	1,165	685	7,441

The number of unskilled and semiskilled workers included in the class of "all other workers" in the above table constitute over 80 per cent of the total number employed; the lace weavers make up about 10 per cent and the lace-curtain weavers a little over 7 per cent. Pennsylvania employs nearly half of the total number of workers

² United States. Department of Commerce. Bureau of the Census. Biennial Census of Manufactures, 1921, p. 196.

and Rhode Island stands next in importance. About half of the employees in the industry are women.

Despite the inclusion, for census purposes, of all lace products in the general term "cotton-lace industry," the custom of the American trade has been to differentiate between the lace-curtain and the lace industry. Although all types of lace machines may be found within the walls of one establishment, there are separate designing, production, and selling staffs for laces made on the Levers machine as distinct from the products of the Nottingham lace-curtain machine. Plain nets or bobbin nets when manufactured in the same factory with lace curtains are grouped with them. Because this distinction is so closely bound up with the history of the industry in this country, and is considered such an important one by manufacturers and workers alike, henceforth in this report the lace and lace-curtain industries in the United States will be considered as two separate but closely allied industries.

DEVELOPMENT OF LACE-CURTAIN INDUSTRY

The history of the lace-curtain industry, like that of other textile industries in this country, is interwoven with the history of the protective tariff. A manufacturer, testifying before the House Ways and Means Committee in the 1921 tariff hearing, said: "I am speaking for an industry that was born under protection, that has lived under protection, and that could not survive without it."³ * * * The industry received its initial impetus in the McKinley Act of 1890, and still remains one of the several "infants" that never grew up.

The first Nottingham lace-curtain machines brought to this country were landed at New York in 1885 and were set up in Fordham.⁴

However, these machines never gave much output. In the spring of the following year an Englishman who was searching for a desirable location for a lace-curtain mill was attracted to Wilkes-Barre, and the first factory of any size was located in that city. At that time the silk industry had not been developed in the mining regions, so the opportunities for gainful employment for women were scarce. As a large proportion of the work of a lace-curtain plant consists of unskilled or semiskilled operations which women, young girls, and boys can perform; the availability of this untapped labor supply was largely responsible for the location of this first plant. A representative of this firm, at the tariff hearings in 1890, strongly urged the increase in the tariff rates which was later incorporated in the McKinley Act. By and with the advice and consent of several interested textile manufacturers, the rate was raised from 40 to 60 per cent ad valorem;⁵ and as a result of this legislation a number of lace-curtain plants were established in this country in a few years. One Philadelphia firm, which had made a great success of the manufacture of carpets and chenille curtains, started the manufacture of

³ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings on general tariff revision, Schedule I. Washington, 1921, p. 2342.

⁴ The machines were transferred from Fordham to Tariffville and thence to Gouverneur, N. Y., where they are still standing, after reconstruction. (The Upholsterer, New York, June, 1918, p. 61.)

⁵ United States. Congress. House of Representatives. Committee on Ways and Means. Tariff hearings, Vol. V, Schedule J. Washington, 1909, p. 4804.

lace curtains in 1890-91, and in the same year a second Philadelphia carpet mill followed its example. This was followed shortly by the opening of a second plant in Wilkes-Barre and one in Scranton. The English and Scotch manufacturers who had heretofore supplied the American market tried to discourage their workers from coming over here to work and to discourage the American manufacturers who were taking up the production of lace curtains. Upon finding that they were unable to prevent the development of the new industry, they began to establish branch plants in this country. A Scotch firm started a branch in Columbia, Pa., in 1892; a large English firm with branches all over the world bought out a small Philadelphia firm in 1898 and, with the addition of more machines, started a lace-curtain mill in Chester. Still later, in 1903, a third large lace-curtain plant was started in Philadelphia.

While the industry was growing in Pennsylvania, a few lace-curtain plants were located in other States. At Tariffville, Conn., a small lace-curtain factory was started as a branch of a Nottingham plant. This mill was the only one in the country which attempted to make use of water power; it, however, met with little success. The early convention reports of the union are full of complaints against the great amount of overtime worked at the Tariffville plant in order to make a living with uneven power facilities.⁶ A large lace-curtain plant was opened in Patchogue, Long Island, in 1890, and somewhat later a jobber who had controlled the selling of lace curtains up to this time started bobbinet manufacture in Newburgh, N. Y.⁷ A second jobber in the trade started making lace curtains at Kingston, N. Y., and later a reorganized mill was established at Gouverneur. Only two concerns were located away from the Atlantic seaboard; the first was the Zion City lace industries at Zion City, Ill., and the second, a short-lived venture, was started at Galveston, Tex., with the obvious intention of being near the cotton supply.⁸ With the exception of the Galveston and Tariffville plants, the lace-curtain mills thus established are still operating, and constitute the 12 concerns in the United States engaged in the manufacture of lace curtains.

Eight of the 12 plants, owning four-fifths of the machines in the United States, are in Pennsylvania.⁹ This State has always maintained the lead in number of machines, number of employees, and quantity and value of products. The reasons for the localization of the industry in Pennsylvania are not hard to find. First of all, lace-curtain plants established themselves on the Atlantic seaboard in order to save freight charges on raw materials and machinery coming from abroad and to be near the skilled labor supply, which likewise came from abroad. The momentum of an industry once established in a locality like Philadelphia tended to draw others. Nearness to fuel supply may have been of minor importance. Proximity to a supply of the unskilled labor which forms the majority of workers in any lace-curtain mill undoubtedly was the greatest at-

⁶ Amalgamated Lace Operatives' Society. Reports of conventions, 1892-1895.

⁷ The Upholsterer, New York, June, 1918, p. 61.

⁸ United States. Congress. Senate. Committee on Finance, Bulletin No. 47. Washington, 1894, p. 41. [S. Repts., No. 475, 53d Cong., 2d sess.]

⁹ The latest estimate of the number of the machines in the United States has been made by Mr. Middleton, of the United States Tariff Commission. He states that 408 of the 518 machines in the country are located in Pennsylvania. (United States. Tariff Commission. Preliminary report on lace. Washington, Dec. 1, 1923.)

traction in drawing industries to the mining regions of Pennsylvania, for there women and children could be secured at lower wages than in the larger industrial centers. Moreover, there may have been advantages—largely of psychological nature—in locating plants in a textile State which was a stronghold of protectionism. Although the lace industry was closely associated with the hosiery industry in England, it seems unlikely that it was attracted to Pennsylvania because of the importance of the State as a hosiery center. Many of the lace-curtain plants in this country were branches of English firms, while the American textile manufacturers who first started the manufacture of lace curtains were engaged in the production of house furnishings, such as carpets, rugs, and chenille curtains.

EFFECT OF TARIFF AND BUSINESS CONDITIONS

Production, which had increased steadily in 1892 and the early part of 1893, was cut in half during the crisis of 1893. This was a severe blow to the industry. All of the mills were closed down or working part time in the latter part of 1893. Several financial reorganizations took place. It is said that one Pennsylvania firm (which weathered the storm) bought a ton of coal at a time for running off samples. Another plant was forced to sell over \$90,000 worth of its goods at auction.¹⁰ This forced sale is reported to have had an interesting aftermath. The lace-curtain importers, who were the jobbers to the trade at the time, testified in the 1893 tariff hearings that no one would buy the American product because consumers liked the unfinished English curtains better. However, the American housewives who bought curtains at the forced sale were so much pleased with them that a market was secured henceforth, and the factory started on a successful career again.

Following the general policy of tariff reductions in 1894, the duty on lace goods was reduced from 60 to 50 per cent. Although the new rate remained in force only three years, the reduction came as a great disappointment to the manufacturers, who had just begun to produce and were meeting other difficulties following the financial crisis of 1893. Englishmen who had risked everything to come over to this country and start the new industry felt badly "sold" at the hands of the politicians at Washington. Many of them became discouraged and went back to England. Under the Dingley Act in 1897, the duty on lace goods was raised to 60 per cent again, and compound, specific, and ad valorem duties were laid on the products of the Nottingham lace-curtain machine. This type of duty apparently brought highly beneficial results to the industry, in view of the fact that a large portion of the lace-curtain machines in the country were imported after this schedule went into effect.¹¹ There followed a period of the greatest prosperity the industry has ever known, extending from 1898 to 1905 but reaching its maximum about 1903.

¹⁰ United States. Congress. Senate. Committee on Finance, Bul. No. 47. Washington, 1894, p. 37. [S. Repts., No. 475, 53d Cong., 2d sess.]

¹¹ United States. Congress. House of Representatives. Committee on Ways and Means. Tariff hearings, Vol. V, Schedule J. Washington, 1909, p. 4864.

This period of prosperity marks the time when Nottingham lace curtains dominated the market for window draperies and enjoyed a great vogue. The progress of the whole industry in this period may be inferred from the progress of three lace-curtain mills in Pennsylvania, from which the Pennsylvania Department of Internal Affairs collected information from 1896 to 1905. By 1905 the capitalization of the three establishments had more than doubled, the market value of the product had almost doubled, the average number of wage earners had more than doubled, while the average wage rather more than kept pace with the increase in the cost of food, which is the largest item of the workingman's budget.

TABLE 4.—DEVELOPMENT OF THREE IDENTICAL LACE ESTABLISHMENTS IN PENNSYLVANIA, 1896 TO 1905¹

Year	Capitalization		Market value of product		Average days of operation		Wage earners		Total pay roll		Average yearly wage		Index numbers of food costs ²
	Amount	Index numbers	Amount	Index numbers	Number	Index numbers	Average number	Index numbers	Amount	Index numbers	Wage	Index numbers	
1896.....	\$741,000	100.0	\$908,289	100.0	274	100.0	763	100.0	\$193,765	100.0	\$253	100.0	100.0
1897.....	741,300	100.0	1,086,945	119.5	296	108.0	855	112.1	223,436	115.3	261	103.2	101.7
1898.....	795,000	107.3	1,219,698	134.1	307	112.0	974	127.7	269,910	139.3	277	109.5	104.7
1899.....	860,850	116.2	1,307,879	143.8	305	111.3	1,098	143.9	313,641	161.9	285	112.6	104.3
1900.....	886,044	119.6	1,337,964	147.1	303	110.6	1,251	164.0	372,460	192.2	297	117.4	107.3
1901.....	913,154	123.2	1,432,392	157.5	302	110.2	1,238	162.3	382,726	197.5	309	122.1	112.7
1902.....	994,195	134.2	1,680,672	184.8	270	98.5	1,407	184.4	437,716	225.9	311	122.9	119.0
1903.....	1,621,723	218.9	1,818,714	200.0	304	110.9	1,804	236.4	531,393	274.2	294	116.2	118.7
1904.....	1,763,252	238.0	1,980,533	204.6	286	104.4	1,858	243.5	603,958	313.2	326	128.9	120.7
1905.....	1,808,098	243.3	1,627,910	179.0	295	107.7	1,638	214.7	504,718	260.5	308	121.7	120.0

¹ Data are from Pennsylvania, Department of Internal Affairs, Bureau of Industrial Statistics Report, 1905, except index numbers which have been computed.

² Data are from U. S. Bureau of Labor Statistics Bul. No. 140: Retail prices, 1890 to December, 1913, p. 30. Figures are index numbers of the cost of a year's supply of food for an average workingman's family in the North Atlantic States.

Unfortunately no continuous history of the industry is available in State or Federal records, so that the story has to be supplemented by information from a wide range of sources and allowances made for discontinuity in time and comparable features of the data. When no data are available from any source, it has been necessary to secure the outline of events from individuals who are thoroughly familiar with the history of the industry, or from what may be called the "common knowledge" of the trade.

With the possible exception of the panic of 1893, which occurred very early in the history of the industry, ordinary business movements have had a less serious effect upon prosperity and depression in the trades than have style changes in the products. It is reported that about 1902 a lace-curtain jobber went to one of the large schools for training in interior decorating and home economics and asked them to work on some substitute for Nottingham lace curtains. He maintained that irregularity of production and the dealer's consequent inability to fill orders promptly made the Nottingham curtains a highly unstable product to handle. As a result of his request the school introduced a scrim curtain trimmed with lace and dotted Swiss curtains, as "colonial curtains," and by 1905 these had completely driven lace curtains out of style. The year 1905 marks the end of the first prosperous period in the lace-curtain industry. A

long period of depression followed, which lasted for a decade and reached very low points between 1907 and 1914. Attempts were made by the lace-curtain manufacturers to regain their lost business by varying their patterns in imitation of the fabric draperies then in style, but to no avail; lace curtains were "out." At the 1913 tariff hearing one manufacturer testified that the consumption of Nottingham lace curtains as against other makes had declined 50 per cent.¹²

During this decade of depression several financial reorganizations took place, which completed a movement begun in more prosperous times, concentrating some two-fifths of the production of the 12 lace-curtain mills in the hands of one group of manufacturers who had been unusually successful in the business.

During the depression those mills not completely closed down because of financial difficulties ran only part time and the workers' earnings were cut by a third or a half for long periods of time. It has been estimated that the lace-curtain weavers in Pennsylvania did not average more than three-fifths of full time during the five-year period between 1910 and 1915.¹³ One manufacturer in this testimony in the 1913 tariff hearings said that the 12,000 workers in the Nottingham trade had been employed only one-half or one-third of full time since 1907.¹⁴ The records of the union of lace operatives are full of attempts on the part of that organization to prevent or minimize the unemployment for which the trade became notorious. For years no apprentices were trained; many men left the industry for other occupations or, worse, became industrial driftwood; several branches of the union turned in their charters; and the industry came to be known as a "dead" trade. The demoralizing effects of this long depression have never been obliterated. No general wage increases were granted to the union workers by the manufacturers for a period of nine years. No wage conferences were held for several years, and when employers and workers did meet the employers claimed that the state of the trade would not permit them to grant any increases and the union did not press the point.

The first general wage increase went into effect in 1916, and this marks the beginning of the revival of the industry. Business picked up rapidly during the war, when the factories made netting for the Government. After the war the building boom with its attendant increase in the demand for window draperies, and a revival of the fashion for lace curtains and nets gave new prosperity to the trade, which promises to rival the prosperity of two decades ago. Machines that have not been used for a decade or longer have been recently repaired and equipped for production. The percentage of full-time employment is higher than it has been for many years, and skilled lace-curtain weavers are reported to be coming over from Germany and other parts of Europe to share in the trade prosperity in this country.

¹² United States. Congress. House of Representatives. Committee on Ways and Means. Hearings [on tariff schedule], Vol. IV. Washington, 1913, p. 4013. [62d Cong., 3d sess., H. Doc. No. 1447.]

¹³ Philadelphia. Department of Public Works. Unemployed in Philadelphia, by J. H. Willis. Philadelphia, 1915, p. 5.

¹⁴ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings [on tariff schedules], Vol. IV. Washington, 1913, p. 3987. [H. Doc. No. 1447, 62d Cong., 3d sess.]

MAJOR ECONOMIC FEATURES OF THE INDUSTRY

From this discussion of the historical background of the industry, attention must be turned to some of the economic factors of importance to an understanding of the industry. The lace-curtain mill tends to be larger than the lace mill because it supplies a more staple product. While the typical lace mill operates from 7 to 15 machines and employs approximately 100 to 150 workers, half of the lace-curtain mills average over 30 machines, and employ from 300 to 500 workers each. The work of the lace-curtain factory is capable of greater standardization than that of the lace mill, hence larger investments of capital, larger plants, and a wide variety rather than extreme specialization of products are the result. The products of the Nottingham lace-curtain machine are used for window curtains, bedspreads, panels, table covers, and similar interior decorating purposes. Narrow insertions, nets, and edgings are sometimes used for trimming women's clothes, although most products of the lace-curtain machine are too coarse for such use. The principal types of fabric, classified according to the pattern or method of weaving, are Nottingham, Swiss, madras, filet, barground, cable, Tuscan net, and combination. Nottingham lace-curtain machines in this country produce articles that have from $5\frac{1}{2}$ to 16 meshes to the inch. Over half of the machines here are 6 to 8 point, and less than one-tenth are finer than 12-point.¹⁵ The present products of the Nottingham lace-curtain machine, with the exception of the curtain called "Nottingham" in the trade, bear little resemblance to the old-style Nottingham curtains, which were made 60 inches wide and 4 yards long, with elaborate all-over patterns. As already shown in Table 2, drapery nets now constitute a large part of the total product of the industry, and lace curtains are now made 36 or 40 inches wide and usually $2\frac{1}{2}$ yards long. New styles of architecture, emphasizing colonial models and new types of windows which are smaller and have radiators under them, have necessitated new and simpler styles of window curtains. The professionalizing of interior decorating and its influence on the artistic tastes in home furnishings of all income groups have likewise affected the lace-curtain industry profoundly. The old style of elaborate all-over patterns has passed through many changes on its way to present styles, from double border to single border, from macramé to madras, to Swiss, etc., and finally to panels, nets, and nettings of a wide variety of patterns and combinations which have become so popular in the last two years. Artificial silk lace curtains, resembling silk fabric draperies, and curtains with patterns worked in variegated colors, have been recently introduced as novelties, but the industry has not as yet sufficient contact with the interior-decorating movement and changing architectural tastes to insure any permanency in its styles.

Data on lace-curtain plants are not given separately in the census figures, so that the only recourse is the one official source of information available, namely, the Bureau of Statistics and Information of the Pennsylvania Department of Internal Affairs. Between 1905 and 1920, no information was collected of use for the purpose of this study, but some interesting figures are available for the

¹⁵ United States. Tariff Commission. Preliminary report on lace. Washington, Dec. 1, 1923, p. 7.

period 1920 to 1922. The following table shows, for five Pennsylvania cities, the development of the lace-curtain plants for these three years. As is noted in the table, the figures include two smaller plants in Wilkes-Barre and Scranton, making "lace goods" primarily. These two factories are, however, so small that their inclusion affects the totals only slightly. The 1920 figures for Scranton and the 1920 and 1921 figures for Philadelphia each exclude 1 factory manufacturing lace curtains. There are all told 8 plants in Pennsylvania which manufacture lace curtain products that might be classified as "lace goods." Lack of uniformity of reporting or classification has given rise to discrepancies in these statistics.

TABLE 5.—STATISTICS OF LACE CURTAIN MANUFACTURE IN PENNSYLVANIA CITIES, 1920 TO 1922¹

Item	Columbia			Scranton			Wilkes-Barre		
	1920	1921	1922	1920	1921	1922	1920	1921	1922
Number of establishments.....	1	1	1	1	2	2	2	2	3
Average number of days of operation.....	293	291	297	293	294	293	250	278	285
Average number of employees:									
Males.....	69	59	65	10	242	259	549	538	592
Females.....	68	61	75	47	408	448	774	646	724
Total.....	137	120	140	57	650	707	1,323	1,184	1,316
Wages paid: ²									
To males.....	\$68,700	\$46,600	\$58,600	\$11,100	\$395,900	\$387,800	\$703,600	\$544,300	\$598,400
To females.....	52,800	35,900	45,300	27,300	329,000	268,000	439,300	346,900	353,700
Total.....	121,500	82,500	103,900	38,400	724,900	655,800	1,142,900	891,200	952,100
Average wage: ⁴									
Males.....	996	790	902	1,110	1,636	1,497	1,282	1,012	1,011
Females.....	776	589	604	581	806	568	568	537	461
Capital.....	350,000	350,000	350,000	73,300	2,166,400	2,166,100	1,899,700	1,645,000	1,696,400
Value of product.....	691,000	342,000	414,200	166,200	2,586,800	1,600,000	2,910,400	1,256,200	3,390,200

Item	Chester			Philadelphia			Total		
	1920	1921	1922	1920	1921	1922	1920	1921	1922
Number of establishments.....	1	1	1	2	2	3	7	8	10
Average number of days of operation.....	257	256	283	260	255	244	266	272	275
Average number of employees:									
Males.....	37	36	42	633	462	496	1,298	1,337	1,454
Females.....	34	36	47	612	400	555	1,635	1,551	1,849
Total.....	71	72	89	1,245	862	1,051	2,933	2,888	3,303
Wages paid: ³									
To males.....	\$58,000	\$51,600	\$59,900	\$1,045,300	\$713,700	\$775,800	\$1,886,700	\$1,752,100	\$1,880,500
To females.....	28,100	24,700	32,800	503,100	291,700	404,200	1,050,600	1,028,200	1,084,000
Total.....	86,100	76,300	92,700	1,548,400	1,005,400	1,180,000	2,937,300	2,870,300	2,964,500
Average wage: ⁴									
Males.....	1,568	1,433	1,426	1,651	1,545	1,564	1,453	1,310	1,293
Females.....	826	686	698	823	729	728	688	663	581
Capital.....	300,000	300,000	300,000	7,872,800	7,278,100	7,437,400	10,485,800	11,739,600	11,949,900
Value of products.....	621,400	466,000	645,000	9,869,800	6,709,200	7,837,000	14,258,800	11,360,200	13,886,400

¹ Data are from Pennsylvania Department of Internal Affairs, Bureau of Industrial Statistics, Report for 1920, and correspondence with director.

² Including one "lace-goods" factory.

³ Not including salaries.

⁴ Average wage computed.

⁵ One-half of product is lace curtains; remainder is "lace goods and embroideries."

⁶ Including two "lace-goods" factories.

Reference to the above figures shows that each lace-curtain plant reporting had an average capitalization of not quite \$1,500,000 for an average working force of between 260 and 375 wage earners. Large amounts of both circulating and fixed capital are necessary in a lace-curtain factory, due to the fact that both yarns and machines are imported and subject to duty. Practically all lace machines are made in Europe, and it is estimated that at the present time it would cost about \$10,000 to set up a new lace-curtain machine in this country. Although the machines have a long life—from 20 to 25 years—repair expenses are very high. As a result, overhead costs tend to assume large proportions in a lace-curtain mill. In addition to the fact that large amounts of capital investment are necessary, it is important to note that the rate of capital turnover is low. It is doubtful if the lace-curtain industry has ever turned its capital over as much as twice in one year; usually it is turned over one and a half times in prosperous years, and less than once in dull years. In this respect it is like other industries where large amounts of fixed capital are invested.

The figures show some interesting differences between important centers of manufacture. Philadelphia plants operated on an average 10 days longer than the Wilkes-Barre plants in 1920, but 23 and 41 days less in 1921 and 1922. Scranton and Columbia show the highest average of days worked in the State. Wilkes-Barre and Scranton employed a larger proportion of women than the other cities in all three years. The average wage as a picture of typical wage conditions is unsatisfactory, but the table shows that with equal regularity of employment for men and women, men received on the average twice as much or more than twice as much as women in all of the cities, except Columbia. Columbia, the one nonunion lace-curtain center in the State, had the highest average of number of days worked but the lowest average of wages paid to men. Philadelphia workers, both men and women, received higher average wages for this period than the workers in other centers. The union however, contends that Scranton and Chester always lead in wages paid to weavers;¹⁸ there may be a larger proportion of auxiliary workers receiving lower wages in Scranton and Chester, which would tend to lower the average wage computed from these figures. The table shows that in 1922 Philadelphia plants had over three-fifths of the total capital investment in the State and manufactured over half of the total product measured by value.

The figures for the average number of days worked by lace-curtain mills in the State of Pennsylvania indicate that there is considerable seasonal unemployment in the industry. It has long been the general custom in the trade to make samples and take inventory during the months of April and October, and slowly begin the spring and fall manufacturing seasons in May and November. The demand for lace curtains has been largely seasonal, because the good housewife on the Atlantic seaboard always takes down her window curtains at the time of the spring house cleaning or thereabouts and puts them away for the summer. It has therefore been necessary for the lace curtain manufacturers to create a demand for their product through-

¹⁸ In recent years the union has compiled average earnings for its local branches which show that earnings in Scranton and in Chester are usually higher than in the other cities.

out the year, or to look for markets in the South and West where curtains are used in all seasons. This has been a slow process and production in the industry is still subject to great seasonal fluctuation. An added complication arises from the fact that the products of certain gauge machines may sell better than others, so that one part of the factory may be oversold, while another group of machines may be without orders and the workers idle for days or weeks. It is not uncommon to find machines of a certain gauge idle for a whole season. Since the machines are not in any way interchangeable, the production of specified classes of goods is limited. At the present time, sales are about equally divided between spring and fall, although formerly as high as 80 per cent of the goods were sold in one season.¹⁷

The bulk of the lace-curtain product is manufactured to order and sold to jobbers or direct to retailers. The jobber was supreme in the industry some years ago, but in recent years several of the larger mills have been manufacturing to stock and marketing their goods through salesmen and national advertising. The union claims that those factories which manufacture to stock and sell directly, rather than through jobbers, give more stable employment, bearing out the economists' contention that the victory of the manufacturer over the jobber has brought greater stabilization to industry. Due to the secrecy which pervades the lace and lace-curtain industries, in company with all highly competitive industries, it is impossible to give an accurate picture of the distribution process in the industry. National advertising on an extensive scale has been undertaken only recently, and its effect in smoothing out any of the heavy seasonal fluctuation is not definitely known.

The 12 lace curtain plants in the country which constitute the industry have no trade association and cooperate only in labor matters, meeting to discuss labor questions, and, since the majority of the firms deal with the union, to negotiate with it. It is reported that those plants which do not have union agreements follow the lead of the majority in granting wage increases and shorter hours, but it has been impossible to check this information. One legitimate field of activity for a trade association, which would appear to be highly profitable, would be cooperative national advertising to prolong the present trade prosperity and help smooth out seasonal fluctuations; but nothing of this nature has yet been undertaken.

LABOR CONDITIONS

Turning from the general economic features of the industry to the labor situation, we find that the workers in the industry are largely English, Scotch, and American. The Americans predominate in the auxiliary occupations, the English and Scotch in the weaving. There are a few German, Polish, and Italian weavers, but they are in a decided minority. The first migration of skilled workers to this country brought over many Englishmen from Nottingham, but many of these became discouraged during the depressions of 1893, and 1905 to 1915, and returned to England. These first migrants were

¹⁷ Amalgamated Lace Operatives' Society. Report of price conference between the manufacturers and operatives in the lace-curtain trade, Sept. 14, 1923, p. 65.

highly skilled men who aided in the setting up of machines and starting the manufacture of lace curtains in this country, and many of them later became foremen and superintendents in the mills. The second group of migrants was Scotchmen. The weavers, who are the most highly skilled group in the industry with the exception of the designers and draughtsmen, constitute about 7 per cent of the total number employed. They are sons or nephews of weavers "in the old country" who came to the United States to reap some of the benefits of a protected industry, in the form of high wages. The average age of the weavers is high, as compared with the average age of the other occupations. In fact, a number of the men who came over between 1890 and 1900 are still running machines.

The great degree of specialization in the industry has had its effect upon the workers, as well as upon methods of production and distribution. There is an extreme lack of labor mobility, with its attendant disadvantages, for the skill of many of the groups in the industry (such as the weavers, the "readers and correctors," the designers, and to some extent the "menders,") is of little if any use in other industries, yet takes considerable time to acquire for this industry. As a result, labor turnover is low, and the workers' length of service is long. With regard to length of service one manufacturer stated in evidence before the House Ways and Means Committee in 1921 that "More than 50 per cent of our employees have been with us more than 20 years. The reason for this is that we are such a specialized industry that if they are successful with us, they are unfitted for a job with anyone else."¹⁸

The problem of labor turnover has never been important in the industry even during the World War, and few factories keep any records of it. One Scranton factory estimates that its yearly labor turnover is about 5 per cent,¹⁹ but this is clearly a low figure.

The industry has been, and is at the present time, largely dependent on foreign-trained labor in the skilled occupations. It has been said by many that American labor does not "take kindly" to the industry; at any rate, American weavers are uncommon except in those factories more remotely situated from the manufacturing centers, where American boys were trained into the work after labor difficulties had driven out the European-trained men. Contrary to the custom abroad, very few weavers have apprenticed their sons to the trade, because they consider this highly specialized trade beset with too heavy handicaps as compared with other trade opportunities. The key position held by the skilled group of weavers has had an important effect upon the labor problems in the industry; this is discussed later in this report.

The skilled weavers are all men; although the Census of Manufactures for 1919 (p. 184) gives 27 women employed as lace-curtain weavers, they were probably employed on some auxiliary process. During the war English lace manufacturers used women as designers and as weavers on small machines because of the shortage of skilled workers, but this is the only experiment of the kind

¹⁸ United States Congress, House of Representatives, Committee on Ways and Means. Hearings on general tariff revision, Schedule I, Washington, 1921, p. 2346.

¹⁹ Letter from president of the mill.

known²⁰ and was given up at the close of the war. The large number of women and girls in the industry and the younger men and boys are found in the preparatory and finishing processes, some of which are semiskilled and others unskilled. Since most of the workers have relatives working in the same or other parts of the lace mill, the industry has all the characteristics of a family industry. It is not uncommon to find a father working as a weaver, a son as a brass-bobbin winder, and a daughter as a mender.

DEVELOPMENT OF LACE INDUSTRY

In contrast to the relative ease with which the lace-curtain industry became established in this country, the lace industry has had a constant struggle to maintain its footing, and is even at the present time in a precarious position. The reasons for this are primarily the uncertainty of tariff schedules, keener competition on the part of foreign producers, and greater technical problems than those of the lace-curtain trade. Both industries have been faced with uncertainty in tariff schedules at critical times in their careers, but the lace-curtain industry has the advantage in the length of time during which low rates were in force on its products. American lace-curtain manufacturers have been more successful than the lace manufacturers in meeting foreign competition, by making deliveries more promptly than foreign producers and by adapting their styles quickly to meet changes in American tastes. American lace manufacturers, on the other hand, have been forced to look to Paris for most of the style dictates on women's clothes and dress trimmings; they have had to overcome the ordinary customer's prejudice in favor of buying an imported rather than a domestic lace, when there is little difference in cost; and, finally, they have been forced to meet keen competition from foreign producers, who, even with high duties, have been able to market their goods successfully in the United States because of superior skill or technical ability, lower labor costs, or, in recent years, the unsettled condition of foreign exchange.

The lace industry dates from the establishment of a silk-lace factory in Brooklyn in 1882, several years before the importation of the first lace-curtain machines. This was followed during the nineties by the establishment of lace mills in Providence, R. I., Jersey City, N. J., and Zion City, Ill. During this period considerable difficulty was found in obtaining skilled lace weavers, designers, and foremen from abroad, as well as in developing a market in this country. It is estimated that by 1910—a period during which the lace-curtain industry had reached its maximum development and then had experienced a serious decline—there were approximately 83 Levers lace machines in small mills throughout New England and in the places mentioned above.

IMPORTANCE OF TARIFF PROTECTION TO THE INDUSTRY

From the time of the McKinley tariff of 1890 to 1909, with the exception of the years from 1894 to 1897, the duty on lace edgings, embroideries, insertions, and the like was 60 per cent ad valorem. In

²⁰ Textile Recorder, Manchester, England, July 15, 1916, p. 73: "Nottingham lace trade after the war."

1909 Congress encouraged the lace industry by raising the duty on all products of the Levers lace machine to 70 per cent ad valorem, and at the same time allowed the importation of Levers machines free of duty for a period of 17 months (until January 1, 1911). Normally there was a 45 per cent duty on machines.

This encouragement to the industry apparently came as a surprise to many of the lace and lace-curtain manufacturers in this country. They were not slow, however, to take advantage of the opportunity to import machines at a considerable reduction in cost. By January 1, 1911, 26 firms had arranged to manufacture Levers laces, and over 400 Levers machines had been shipped from England into the United States,²¹ 136 of which were imported into the State of Pennsylvania alone. Several large lace-curtain plants in Philadelphia extended their operations to include the manufacture of laces. However Rhode Island took the lead and the lace industry may be said to be localized in New England; a recent estimate of the number of Levers machines in the United States credits Rhode Island with 215 of the 590 machines in the country.²² In 1914 and 1919 Rhode Island led all States in the manufacture of Levers laces as measured by quantity and value of product, and in 1919 it employed about half of the lace weavers working in the United States.²³ The localization of the industry in that part of the Atlantic seaboard may be attributed to the momentum of an early start and the interest of a few Rhode Island capitalists in the lace industry.

A long process of assimilation and adjustment followed the extensive importation of lace machinery in 1910. There was great difficulty in getting skilled weavers to run the machines. A result of the large number of small producers in the French and English lace industries had been the training of weavers for specialized types and patterns of laces, so that it was difficult to get men with sufficient all-round experience to be of value in the larger factories in this country. The industry also had difficult technical problems. There was besides keen competition from foreign producers, older domestic producers, and manufacturers of embroideries and other goods which compete with laces. The new factories were just about in working order when the rates on Levers lace goods were reduced by the Underwood tariff act of 1913. This came as a bitter blow to the industry. One manufacturer stated at the tariff hearings in 1921:

We believed that it was the intent of Congress to encourage the creation of a distinctive American industry, and that it would not hastily revise a decision made on its own initiative.

The action of Congress therefore in 1913 in reducing the tariff to 60 per cent was a keen disappointment to many who had started in the new industry. It is a matter of record that one-third of the machines imported duty free have changed hands since 1913.²⁴

²¹ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings on general tariff revision, Schedule N. Brief of North American Lace Co. Washington, 1921, pp. 3362, 3375.

²² United States. Tariff Commission. Preliminary report on lace. Washington, Dec. 1, 1923, p. 10.

²³ United States. Department of Commerce. Bureau of the Census. Fourteenth Census, 1920. Census of Manufactures—Report on selected industries, Vol. X, p. 184.

²⁴ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings on general tariff revision, Schedule N. Washington, 1921, p. 3375.

These provisions remained in force for nine years. The outbreak of war in 1914 led to the closing down of the French lace industry. As a consequence, lace went out of style, and the American market was likewise curtailed. Work on netting for the Government and on odd jobs kept the industry going during this period.

At the close of the war two new factors were apparent in the foreign competition on laces. The first factor was the growth of the hand-made lace industry in the Orient, where low labor costs made it possible to market hand-made laces in this and other countries at low prices in competition with the higher grades of machine-made lace. The second factor was the sale in the American market of goods produced in countries whose exchange was considerably below par, making it possible to sell goods in this country, even after paying high rates of duty, below the domestic costs of production. This competition led the domestic manufacturers to ask for greater protection in 1921, and in the Fordney-McCumber Act of 1922 the rate on Levers products was raised to 90 per cent ad valorem. This has been designated as "the highest straight ad valorem rate ever incorporated into an American tariff law for simple protective purposes."²⁵

The tariff hearings on the lace schedules have always been interesting because competition has been keen enough to induce both the importers and the domestic manufacturers to attend in full force. A recent hearing (December 10, 1923) preliminary to an investigation of foreign and domestic costs in lace manufacture brought out, among other interesting things, the statement from one manufacturer that he had secured better protection under the old 60 per cent ad valorem duty with stable exchange conditions than he now had with the 90 per cent duty and fluctuating exchange conditions. This is maintained by other manufacturers as well. A fact of further interest brought out in the hearing was the effect of the general tendency in the styles for women's and children's clothes toward more tailored models. The staple "bread and butter" product of the industry has always been the "Vals" and other lace edgings for trimming dresses and underwear, while feature or novelty articles such as metal and silk laces for evening dresses and afternoon frocks have been comparatively of minor importance. The industry has therefore been badly hit by this new trend in women's and children's clothes. An attempt was made by the American manufacturers to increase their sales about two years ago by introducing so-called "Spanish lace," a modified imitation of the silk hand-made Spanish lace shawls. "Spanish lace," usually made of artificial silk and cotton, became popular, and had a vogue for two seasons, but is at present out of style as a feature article. The industry is again faced with a decreasing demand for its product and with keen competition on the part of foreign producers for whatever market exists.

The classes of lace goods in which foreign competition is the keenest and which are therefore imported in large quantities have

²⁵ Quarterly Journal of Economics, Cambridge, Mass., November, 1922, p. 44: "Textile schedules in the tariff of 1922," by A. H. Cole.

been described by the United States Tariff Commission in its preliminary report on lace (p. 13):

Imports of fancy laces are largely fine French vals and silk laces. Other machine-made products which are imported may be classed under three heads: First, laces made on machines of finer gauge than the domestic machines; second, laces in which the cost of the labor processes makes it impossible to compete, or in which the cost of preliminary preparation is so great that the demand would not justify the outlay; third, laces which are beyond the technique of the draughtsmen and twist hands of the domestic industry at its present stage of development. To sum up, the situation would seem to be as follows: There is very little foreign competition upon staple laces for underwear; it is keen upon better-class goods for outer wear, while upon the best class of novelty goods the demand is supplied almost entirely from imports.

The classes of goods made in this country are primarily narrow insertions, edgings, and flouncings for dress trimmings or house-furnishing purposes, veilings, and wide all-over nets for dress materials or draperies.

ECONOMIC AND LABOR FEATURES OF THE INDUSTRY

Some appreciation of the technical problems which faced the manufacturers producing Levers laces may be gained from a brief description of the technical and economic features of the industry. Levers lace machines are usually narrower than lace-curtain machines, ranging from 172 to 224 inches in width. They produce simultaneously a large number of narrow laces connected together with binding threads, which are later pulled out. Levers machines in the United States range from 7-point to 15-point, making articles with 14 to 30 meshes to the inch. While a 7-point lace-curtain machine has seven bobbins passing back and forth along an inch of width on the machine to make seven meshes to the inch, a 7-point Levers lace machine has twice as many, or 14 bobbins to the inch of width on the machine. The bobbins are very thin rolled-brass disks upon which are wound, under heavy tension, "prepared" yarns in amounts varying from 80 to 250 yards.²⁶ Many bobbins are so thin that the two disks with the yarn between will not measure more than one-fortieth to one-fiftieth of an inch.²⁷ The brass-bobbin yarns must bear the weight of the lace or lace curtains as they are made, and must therefore be strong and of uniform quality. Lace and lace-curtain manufacturers in this country import all of their brass-bobbin yarns and also some of their ornamenting threads. The warp yarns can be secured locally. The lace industry as a whole is the largest consumer of imported cotton yarns. In 1918, for example, 42.8 per cent of all cotton yarns imported into the United States was used by the lace, lace-curtain, and bobbin-net factories. The Levers industry uses finer yarns than does the lace-curtain industry, even going to the finest 400/2. Lace curtains are rarely finer than 16 meshes to the inch, and are usually made of yarns coarser than 100/2.²⁸

²⁶ Textile World Record, February, 1914, p. 495: "Waste yarn in lace manufacture," by — Haddon.

²⁷ Textile World Journal, May 13, 1916, p. 2335: "Lace yarns as made in England," by Sam Wakefield.

²⁸ United States. Tariff Commission. Tariff Information Series No. 12: Cotton yarns. Import and export trade in relation to the tariff. Washington, 1920, pp. 60, 66, and 69.

No statistical data are available for lace factories separately so the economic features of the industry must be summarized in general statements only. The size of the unit in the lace industry tends to be smaller than in the lace-curtain industry because its technique is less suited to mass production and it manufactures a less staple product. In the 1921 hearings it was estimated that approximately \$21,000,000 was invested in the lace industry in the United States and that it employed approximately 8,000 workers.²⁹ This was undoubtedly an exaggeration of the numbers employed, since the census figures for that year give only about 7,000 in both the lace and lace-curtain industries. However, the industry in common with the lace-curtain trade requires relatively large amounts of capital. The great bulk of the product is sold through jobbers, with the exception of a few firms like the Zion City plant, whose entire output is taken by a single company and sold through its wholesale and retail stores. Some firms sell a portion of their output directly to manufacturers of women's clothes, but most of the product is sold through wholesale and retail jobbers.

The central and most important figure in the lace mill is the designer. The motifs for most of the machine-made lace products are copies or adaptations of Italian, Belgian, and French hand-made lace panels and other art objects, the work of adaptation requiring great skill. Since every thread in the Levers lace machine—and there are usually between 12,000 and 30,000³⁰—works independently of every other thread, when the design is traced upon cross-section paper magnified to scale, the course of each thread and its position in the machine must be drawn and marked by means of a number system. From this drawing, cards are punched which go upon the mechanism of the machine controlling the movement of the threads in the working out of the pattern. Most of the designers are English or French.

The lace weavers are generally considered to be more skilled than the lace-curtain weavers. The threading of the lace machine is a more intricate process, requiring constant reference to the designers' drawings, and the adjustment of the tension of the threads is likewise a more difficult problem. It is possible to change the class of goods on a lace-curtain machine without "stripping" the machine, but such a change on a Levers machine requires a complete "stripping" or cutting down of the yarns, and it may take from two to four weeks to put the machine into operation again. The lace weavers are for the most part English or French and like the lace-curtain weavers received their training in Europe.

It is generally considered that it takes about five or six persons to work on the auxiliary processes of one lace-curtain machine and seven or nine for a lace machine, although the numbers vary with the gauge of the machine and the type of work. However, here as in the lace-curtain industry, the majority of the workers are engaged

²⁹ United States. Congress. House of Representatives. Committee on Ways and Means. Hearings on general tariff revision, Schedule N. Washington, 1921, pp. 3362.

³⁰ United States. Department of Commerce and Labor. Bureau of Manufactures. Lace industry in England and France, by W. A. Graham Clark. Washington, 1909, p. 46.

in the preparatory processes such as beaming, bobbin winding, threading, and pressing, and the finishing processes, such as bleaching and washing, dyeing, dressing, clipping, mending, and inspecting. Clipping and pulling threads is very often done as homework. The majority of the woman workers are employed at dressing, clipping, mending, and inspecting. Every time a thread breaks in the machine, or whenever bobbins run out, a break occurs in the lace which has to be mended by hand or sewing machine. Experienced menders become very adept, so that it is impossible to detect that a break has ever occurred. This work is probably the most skilled of the auxiliary processes.

Chapter III.—RISE OF THE UNION, AND LABOR SUPPLY OF WEAVERS¹

FORMATION OF UNION

For a time after the first group of Nottingham lace-curtain weavers came to this country they retained their membership in the Nottingham union, but as their number increased, local benevolent societies maintaining death and sick benefits were formed which became the nucleus of a movement for a national trade-union. Early correspondence between the secretaries of these benevolent societies in Philadelphia, Patchogue, and Tariffville culminated in the calling of the first convention at Philadelphia in September, 1892. Delegates were present from Scranton, Wilkes-Barre, Patchogue, Tariffville, and Philadelphia. A later convention in December of the same year included also a delegate from Columbia, Pa. As a result of these conventions the Society of Amalgamated Lace Curtain Operatives of America was formed, whose object, according to its original constitution (1893) was "to raise a fund from the various branches thereof and to maintain by their united efforts a fair remuneration for their labor and to regulate the relation existing between employer and employed."

UNION POLICIES AFFECTING CONTROL OF LABOR SUPPLY

In an industry in which great irregularity of employment, accompanied by a high degree of specialized skill, places a premium on security of the job, a trade-union's efforts to improve working conditions tend to center first in measures affecting the entrance to the trades. Control of the labor supply has long been recognized as the most important feature of trade-union policy in those industries in which it is economically possible. In the case of the lace and lace-curtain weavers, a natural monopoly of highly skilled crafts in an industry in process of transplantation was molded into effective control of the labor supply through the following union policies: (1) High initiation fees if the circumstances warranted restriction; (2) length-of-service requirements in accepting transfer or traveling cards from European lace workers' trade-unions; (3) regulation of apprenticeship with respect to numbers allowed, age limits, and length of term to be served; (4) semiofficial and official action on importation of lace weavers by American employers, under the alien contract labor law; and (5) attainment of the closed shop.

The years during which these policies have been in force may be roughly divided into three periods: First, the period of initial organization from 1892 to 1900, when low entrance fees were charged and length-of-service requirements for union weavers from abroad

¹ Unless otherwise noted, data are from records of Amalgamated Lace Operatives' Society; Convention proceedings, and Minutes of executive board.

were shorter than in later years; second, the period from 1900 to 1919—a period of short-lived prosperity followed by a long-drawn-out depression in the lace-curtain trade—when entrance fees were made prohibitively high, service requirements were raised and strict interpretation of the apprenticeship regulations was enforced to protect the unemployed members; and third, the period since the war, when the industry faced trade prosperity with a labor shortage and the union took cognizance of the new situation by reducing entrance fees in all of the crafts. During the second period, the importation of large numbers of Levers lace machines in 1910 necessitated the importation of skilled Levers workers to run them. The margin of labor supply in this craft was narrow, and the union made an effort to prevent the overstocking of the market, by presenting evidence on the state of employment for the Levers and lace-curtain trades in this country.

FEES

In the 1892 convention, when the original constitution and by-laws were drawn up by delegates representing a small membership, a \$2 entrance fee was decided upon because it might act as an inducement to increased membership; but this zest for increased membership was not lasting. Four years later the entrance fee for "minors," as the apprentices were called, was placed at \$3, while that for competent men was raised to \$5; the latter was again raised to \$10 in 1900. There followed a period of great prosperity for the industry during which several important changes took place in the organization and policy of the union. Before 1902 lace-curtain operatives coming from abroad were required to have one year's experience before their transfer cards were accepted by the society. In that year the requirement was raised to three years' experience. At the 1905 convention an appeal was made by the Newmilns Lace Workers' Union in Scotland to admit without entrance fee their members who had three years' traveling cards, but the convention declined the request. At the same time, because the fee had now become high enough to discourage the organization campaign in the new districts, the executive board was given the power to reduce the entrance fee "in the making of new branches only."

Following the prosperity of 1902 to 1905, there was a long period of depression which reached very low points between 1907 and 1914. In this period the society tried to protect its unemployed members by raising the entrance fee for the curtain men to \$100, and for the Levers men, who were for the most part unorganized, to \$20; foreign transfer-card requirements were raised from three to five years' experience. After the organization campaign among the Levers men in 1912 their fee was raised to \$50, and at the same time the minors' fee was raised to \$20. The union's attitude is well brought out in a quotation from the minutes of the executive board for February 2, 1907:

A deputation from the trade committee of branch No. 1 [the Philadelphia local executive committee] appeared before the board, and stated that it was ready to take action against the influx of foreign help streaming into No. 1 Branch, and suggested the closing of the branch against any new members. * * * The board decided that the restriction was being made to give employment to the present membership, and therefore allowed them to raise the entrance fee to whatever they deemed necessary to suit the occasion.

High initiation fees, combined with a refusal to work with non-union men, amount to practical exclusion. The system is clumsy but effective.

TRANSFER OF WORKERS

Every time the society changed its fees or traveling-card requirements it had to notify the European unions of lace workers. Although the English, French, Spanish, and Scotch unions recognized each others' cards and admitted members without entrance fees, the American lace operatives did not reciprocate when given the same privilege.² An attempt was made at this time to form an international federation of lace workers and one of the Nottingham union officials visited this country to speak before all of the local branches in the interests of the federation. However, in a ballot of the American union on the question of affiliation, the proposal was rejected.

The restrictive policies mentioned above remained in force for about 10 years, a decade of depression in the industry when few apprentices were trained and many members dropped out of the trade. When the war and the building boom after the war brought greater prosperity and less danger of an oversupply of labor, the entrance fees for both curtain and Levers men were reduced to \$25. This change was made at the time of the reorganization of the union in 1919. Although the Levers fee has been still further reduced recently, the entrance fee for curtain men was again raised to \$100, in 1922. This was because employers were hiring newly arrived immigrants from the lace industries of Europe, while union members were unemployed, and the union followed its customary policy of protecting the present occupants of the jobs against newcomers.

In a number of cases extra entrance fees were charged in addition to the regular fees as penalties or fines for "working detrimental to organized labor" during strikes; and one Italian was charged an additional \$5 until he proved that he had held membership in an Italian lace-makers' union.

APPRENTICESHIP REGULATIONS

The apprentice regulations in the lace and lace-curtain industries have been highly contested features of policy, second only in importance to the closed shop issue in the history of the union. In the early days of 1892 one apprentice, or "minor," was allowed for every five journeymen. This rule did not arouse much attention until the 1894 convention, when the delegates from the Philadelphia branch urged the convention to a "more strict enforcement of the minor rule to prevent overstocking of the market." They also urged adherence to the age-limit rule for minors, which did not allow men to become apprentices under the age of 18 or over the age of 25. The length of apprenticeship had been fixed at three years, and a minor served at the following rates: "Sixty per cent the first year, 75 per cent the second year, and 90 per cent the third

² Johns Hopkins University. Government of American Trade-Unions, by T. W. Glocker. Johns Hopkins University Studies, vol. 31, 1913, p. 83.

year of one-half the racks made on the machine, the difference to be equally divided between the teacher and the employer." These regulations would "keep men out of the trade," according to the convention delegates, and it was urged that "the governing of the laws of supply and demand is necessary to maintain a fair rack price."³

In 1896 the number of minors was cut to one to every nine journeymen, a ratio which still obtains. Although the ratio of apprentices to journeymen varies considerably from trade to trade, depending upon the methods of working, degree of skill required, and ability of the craft to insure positions for its workers when trained, a ratio of one to nine workers is not out of line with ratios in similar trades. In the silk-ribbon industry, which presents an analogous situation because it is also a fashion-textile trade, the ratio of apprentices is one to ten and the length of the apprenticeship term is three years, although especially qualified persons may finish in two years. In the Nottingham lace industry the ratio in the three crafts of lace, lace-curtain, and plain-net weaving is one to seven, but the term of apprenticeship is four years for Levers and lace-curtain apprentices and three years for plain-net weavers. The shorter term in this country practically cancels the difference in the ratio.

The requirement with regard to the length of time to be served by other members of the lace trade entering the society was changed from six months to two years in 1897. This requirement applied particularly to Levers lace workers who had been coming over to work in the new lace mills in this country. In Brooklyn, the original home of the lace industry here, a small local union of Levers lace workers was formed several years prior to the establishment of the lace-curtain operatives' organization. Both organizations had charters from the American Federation of Labor. When the 1897 convention lengthened the time required for lace workers to become competent lace-curtain workers from six months to two years, an appeal was made by the Brooklyn Levers Society, which had been badly broken up by strikes, to secure easier terms of entrance for its members into the lace-curtain operatives' society. However, the change was supported by a later convention despite the appeal, and the delegation from the Levers Society left the convention. Shortly after this they agreed to act as strike breakers during a curtain-shop strike in Wilkes-Barre. They would never admit the charge of "scabbing," but when they were taken into the lace-curtain union after the strike their own organization disappeared. The membership provision of the lace-curtain society was then changed so as to admit all "practical lace operatives" of both branches of the industry; and a year or so later its name was changed to the Amalgamated Lace Operatives' Society. In 1902 the probationary period required of weavers from other branches of the lace trade was reduced to 20 months but at the original rate of pay, namely, "80 per cent of one-half of the racks made, the difference to go to the men with whom they worked, provided the latter were competent lace makers." In later years,

³ "Rack" is the universal basis of measurement of production in the lace and lace-curtain industries. In the making of lace curtains it means the product obtained by 1,440 motions of the lace-curtain machine; in the case of the Levers machine, by 1,920 motions.

when the long period of depression began in the lace-curtain trade, and the importation of lace machines free of duty in 1910 led to a demand for lace weavers, several lace-curtain operatives transferred to the lace trade and became "improvers." With the return of prosperity in recent years, however, the trend of the movement of operatives has been the other way.

During the early period of prosperity in the trade, particularly between 1901 and 1902, the employers were constantly asking the society for minors; one firm asked for as many as 23 at one time. At the 1905 convention a regulation was made giving the executive board power to authorize the employment of a sufficient number of minors "to relieve the situation" in shops where it was "definitely ascertained that normal conditions prevail and competent workmen can not be secured by employers."

Immediate advantage of this provision was taken by employers. However, when the depression came and men were thrown out of employment, the question of interpretation of "normal conditions" arose. In 1906 permission for the employment of six minors, given to one of the Philadelphia plants by the national executive board, led to a dispute between the board and the local trade committee of Branch No. 1, always the largest and most obstreperous of the local branches. Branch No. 1 in general meeting had refused to accept the minors as members, and the "responsible member" of the shop committee had prevented one new minor from working a machine. After several deputations and parleys the executive board resigned, but the other branches gave it their support and Branch No. 1 was forced to rescind its action. Nevertheless, the regulation was modified by the 1909 constitution (Art. IV, sec. 1) so as to restrict the board's power with regard to minors to "shops where normal conditions prevail for four weeks previously (provided however that the branch within whose jurisdiction the said shop is located, and the shop committee have been previously consulted on the matter)."

The problem of definition of "normal conditions" came to the fore again in 1913, when a manager contended that the men were getting as much wages as they had at a previous grant of minors, while the deputation from the executive board contended that while men "walked the streets" a shop could not be considered to have normal conditions. Again, in 1916, a lockout was precipitated at one shop where a man applied for work, but the shop committee held that conditions in the shop were not normal, whereupon the manager shut off the power and the men were locked out. The question was not settled until the workers of another shop struck in sympathy. During the Levers price conferences in 1916 and 1917 the matter of an increase in wages, which had been pending for years, was made contingent upon more flexibility in the minor rule and negotiations on the interpretation of "normal conditions." No agreement on the latter point was effected until recently. The industry is now considered "normal," if the workers are "employed 80 per cent of full time (making racks) for four weeks previously," a tacit acknowledgment of the overdevelopment in the industry.

After the long depression in the trade, the dropping out of apprentices and members led to a shortage rather than an oversupply of skilled workers, and with the recent trade boom, the problem has

now become that of attracting workers. It has been stated before that with few exceptions the weavers have not trained their sons to be weavers; the sons often work in the lace industry, but if so, they are employed as auxiliary workers. The lace-curtain plants in the mining regions of Pennsylvania and in the small towns have apparently been able to attract a sufficient number of apprentices for their needs because of the limitation of other trade opportunities and the relative advantages of lace weaving as compared with coal mining before the mines were unionized. However, in Philadelphia the difficulty of getting apprentices has presented more of a problem. In recent years, firms have made special efforts to induce groups of auxiliary workers to become apprentices in weaving under special instruction; but even this has not increased the numbers of apprentices to the full quota allowed. One of the difficulties in the situation is that through organization the auxiliary workers have been able to obtain higher wages, which in some cases have equaled or approached those of the weavers. The auxiliary workers, furthermore, do not have the inconveniences attendant upon two-shift operation at work requiring long employment before full earning capacity is reached. The high wages in the unskilled occupations, the long period of apprenticeship required of weavers, the haphazard methods of training at most of the plants, and the two-shift system may be cited as conditions within the industry which tend to produce a shortage of skilled labor. The industry is therefore dependent upon European trained weavers—at times an uncertain source of supply—to fill gaps in the ranks of the weavers whose present average age is high.

There is considerable difference of opinion as to the length of time required to become a skilled weaver. The present union requirement for the term of learning both lace and lace-curtain weaving is three years. One manufacturer contends that six months to a year is all that is necessary for training if one could hold over the apprentices' heads the fear of losing their jobs. He contends that union organization deadens initiative and that the security the workers have in their jobs eliminates competitive effort. The union, on the other hand, contends that since the production is on a piecework basis, no restriction of output is possible and great competition results. Methods of training apprentices have, at any rate, been haphazard. Few weavers in any one mill, whether working on lace or lace curtains, can make all classes of goods. Apprentices are turned over for instruction to other workers, who may or may not be good teachers. There is seldom much variety in their work, and no effort is made to transfer them to all machines or all grades of work. When they become weavers they tend to stay on the gauge of machine and the class of goods they have learned to work.

That some of the reasons why apprentices are scarce may be charged to the industry, is proved by the fact that in a few trades there is no problem of attracting apprentices. A case in point is the apprenticeship plan in the silk-ribbon weaving trade in Greater New York, arrived at through a joint agreement between employers and the union of silk ribbon weavers and described at length in Bulletin No. 341 of this bureau. Although the general agreement in the silk-ribbon industry was abrogated in June, 1923, the apprenticeship plan, with minor modifications, is still in force.

The problem of attracting apprentices to the lace-weaving trade reflects in part the general movement of the younger generation away from the trades to the clerical and unskilled occupations. This is partly due to conditions within the industries, such as those mentioned, and in part to the general educational system. Under the policy in vogue in the United States manual training has been used in connection with vocational training for particular occupations, rather than for its general cultural value. As a result the desire to do things with one's hands has remained in a large measure undeveloped.

IMPORTATION OF FOREIGN LABOR

The artificial restriction of the labor supply by the union was aided by the small size of the industries, their localization along the Atlantic seaboard, and the necessity of importing labor under the exceptions granted in the contract labor law allowing the importation of skilled labor if there was a recognized shortage in a particular craft in the country.

It is always amazing to find how quickly knowledge of trade prosperity in this country finds its way to Europe and leads to a trail of immigrants. This has been true of our general business-cycle movements as well as of particular trade booms, like those of the lace-curtain industry from 1902 to 1905 and in 1922 and 1923. Most of the weavers, however, had relatives "in the old country." Because of the relatively small number of plants and the tendency to localization, it was fairly easy for the union to follow the movements of curtain weavers coming into the country, even before recognition of the union or the closed shop had been attained. Friends or relatives, often even the English and Scotch unions, reported the departures of lace workers from Europe. It was therefore easy to write to the newcomers and interest them in joining the union here. In order to prevent their being used as strike breakers, the lace workers' society always inserted advertisements in foreign newspapers to warn loyal union workers of any strikes in progress.

A feature of unusual interest in the history of the lace workers in this country is afforded in the so-called "lace makers' cases" under the provisions of the alien contract-labor law. The importation of skilled labor by American employers has not been a common feature of labor policy in this country. Occasionally skilled hand cigar makers have been imported, and expert German machinists have sometimes been brought in to set up new hosiery or other machines; but the lace workers have been the only imported group that has remained in any considerable number, and their cases are therefore unique in American labor history.

The original alien contract labor act of 1885 as amended at various times contains the following proviso: "*And provided further, That skilled labor may be imported if labor of like kind unemployed can not be found in this country.*"⁴ The question of importation of

⁴ United States. Bureau of Immigration. Annual report, 1902, p. 36. The full text of the proviso reads as follows: "*Provided further, That skilled labor may be imported, if labor of like kind unemployed can not be found in this country; and Provided further, That the provisions of this law applicable to contract labor shall not be held to exclude professional actors, artists, lecturers, singers, ministers of any religious denomination, professors for colleges or seminaries, persons belonging to any recognized learned profession, or persons employed strictly as personal or domestic servants.*" (General Laws, 1907, ch. 1134.)

skilled men has therefore been important to the society, for it was occasionally able to prove that "labor of like kind" could be found unemployed in this country. Before 1903 discussion on the question of importations or of the work of the Bureau of Immigration did not find its way into the records studied except in two instances. First, in the minutes of the executive board for February 3, 1898, appears the following statement: "Discussion took place in regard to men coming over from the old country, but the meeting could not come to any definite manner of stopping same, the general opinion being that it was a question for the branch to deal with. Again, in the convention of 1901, a resolution was adopted "recommending that the branches stop fighting the immigration laws." In 1903, during a prolonged and bitter strike waged by the first Levers branch of the society in a Rhode Island mill, the brother of a strike breaker at work in the shop landed at Ellis Island and was held for inquiry on the ground of illegal importation by the employer of the mill. The union representatives asserted that money for passage had been forwarded to the man indirectly from the employer, and that he had a contract to work in the shop where the strike was being waged. The case was finally dismissed because of insufficient evidence.⁵ When a second Levers plant was out on strike some years later, a similar charge was made. In a strike, however, rumors of the coming of strike breakers and an employer's obvious attempts to obtain strike breakers, if combined with a coincident landing at Ellis Island of several good weavers or other lace workers, would lead to immediate suspicion by the strikers and an attempt on their part to set the Government machinery working in their favor. The original attitude of the Bureau of Immigration in a strike situation was brought out in the Tampa cigar makers' case, when it was held that skilled workers out of employment by their own choice as the result of a strike should not be considered "unemployed" within the meaning of the act. However, later commissioners and inspectors showed some leaning to the view that if every time the workers tried to improve their conditions by striking, their employer could go abroad and get all the strike breakers he needed, the original purpose of the act would not be fulfilled.

In 1905 the union fell into an awkward situation because it testified against the admission of two pattern readers. The latter were released pending a decision on their appeal against deportation and went to work in a New York State lace-curtain mill. They later became prominent in the forming of a new local branch of the society, and when their case was reheard, asked the society to use its best efforts in their behalf. The union did make some effort to have the case dropped, but it involved a question of the legal rights of the Immigration Bureau and was pushed to the end. The men were deported, but came back in a few months' time and nothing further was heard of the matter.

It became customary for union representatives to testify on the supply of labor in the trade in the hearings at the several immigration ports. In order to comply with the law as interpreted by the immigration officials an employer had to advertise in several newspapers in this country and exhaust all sources of labor supply

⁵ United States. Bureau of Immigration. Records, 1903. Farrands case.

before he was permitted to import skilled labor. The Rhode Island firm involved in the first of the lace makers' cases imported men again in 1909, and a union representative testified at the hearings. He stated that plenty of men could be obtained by the firm if "American conditions" prevailed; that the firm paid 25 per cent below the wage scale of other manufacturers, and discriminated against union men. The foreigners were admitted, however, and the decision was as follows:

After careful inquiry and consideration it was decided that the men should be admitted, as at the time of the importation the supply of such operatives did not equal the demand; but it was also concluded that the margin with respect to this class is so narrow, that conditions are likely to change within a very short period of time, making it necessary that careful inquiry shall be instituted whenever foreigners belonging to that skilled trade attempt to enter the country.⁶

By the tariff act of 1909, it will be remembered, the importation of Levers machines free of duty was allowed for a period of a year and a half. This reopened the question of importation of skilled men to run the machines, and several firms were given permission to import men "after careful investigation."⁷ In the early part of 1911 the following statement was made by the society's secretary before one of the immigration inspectors:

While there is no justification in opposing the importation of skilled Levers hands just at the present time, there is a probability of the supply exceeding the demand in the near future owing to fluctuating conditions; the slack season is approaching; lace-curtain hands can learn to operate Levers machines within a period of from 1 to 12 months, and there are a number of this class unemployed at the present time.

In an effort to meet the labor requirements of the new lace factories the union offered to make extra grants of minors in order that American boys might be trained in to the trade; but the manufacturers preferred to import men already trained. A number of lace-curtain weavers applied to become Levers "improvers" because the curtain trade was badly depressed at the time, and the length of term required for a curtain weaver to become a Levers weaver was not more than a year. However, only a few were chosen to undertake the transfer. The manufacturers felt that they could not afford to have a large proportion of untrained men in the initial stages of the industry.

An interesting case arose during this period in connection with the request of a lace-curtain manufacturer in New York State for permission to import auxiliary workers from Canada on the ground that they were skilled labor and that he could not secure them in his vicinity. The moot question in this case was, "What is skill?" After extensive investigation in which the union took part, it was decided that lace menders were semiskilled, but that the other workers in question—spool winders, threaders, and overlockers—were unskilled because their work could be learned in a few weeks' or a few months' time. No lace-curtain mills existed in Canada, so it was obvious that the employer was going to train them at his own factory. It was further ascertained that the reason he could not secure auxiliary workers was that the wages he offered were below the rates paid in

⁶ United States. Bureau of Immigration. Annual report, 1909, p. 119.

⁷ Idem, 1910, pp. 123, 124.

other lace-curtain centers. When pressed on this point he contended that he had to pay lower wages because his factory was situated 350 miles from the market, and that he had to pay extra freight charges on his materials and his own traveling expenses back and forth. Permission to import labor was denied.⁸

Many complications arose in an interesting case in 1910 in which seven men were imported by one company which had made "no honest attempt to comply with the provisions of the law," according to the immigration inspector's report. When the importation of the men was exposed during the hearings, an official of the company renounced them. They were ordered to be deported, but appealed, and were released pending a rehearing. They went to work at the plant of the aforesaid company while waiting. There were two complications in the case: (1) Conflicting testimony of those examined showed that all parties concerned believed they were violating the law; (2) the recruiting abroad of lace makers had been confined to Levers workers, of whom there was a recognized shortage due to the recent importation of machines, but in this case only two or three of the seven could be considered Levers lace makers. Suit for \$16,000 was therefore instituted by the Government. The employer claimed that the union's evidence had been the cause of the Government's suit, whereas the Bureau of Immigration records showed that hearings had taken place before the union was asked to give evidence. The union's evidence was confined to the fact that the employer in question had made no request for labor, and that the union could have supplied men if requested. Nevertheless other manufacturers had recently been given permission to import, and the employer was able to prove that his industry was an essential part of the economic organization of his state. While he admitted there had been perjury and very bad handling of the situation at the time the men were imported, he maintained that there was no need for the company to be secretive about it, because there was recognized shortage of that type of labor in the country. Upon these grounds the men were allowed to stay, and the Government's suit was dropped.⁹

Under the immigration act of 1917, the Secretary of Labor is empowered to hold investigations and hearings before men are imported, to determine whether "skilled labor of like kind unemployed in the country" can be found; and on the basis of his conclusions give or refuse employers permission to import labor.¹⁰ This method has obvious advantages from the point of view of all parties concerned. The machinery for the importation of skilled labor in times of recognized shortage has been but little used by employers; in fact, it is probable that many employers do not know of its existence. The lace industry came under the category of a new industry in process of establishment. It was probably the last European industry to be transplanted, and came within such a recent period that full advantage could be taken of this machinery. With the more recent general restrictive policy now in effect with regard to immigration, a noticeable increase in the number of requests for permission to import has taken place, and a still greater increase is

⁸ United States. Bureau of Immigration. Records, 1910. International Lace Co. case.

⁹ *Ibid.*, 1910-11. Oppenheimer-Levy case.

¹⁰ United States. Bureau of Immigration. Annual report, 1919, p. 19.

expected by immigration officials. The question of exactly what constitutes "skilled labor" has never been settled; with considerable elasticity in its interpretation, all cases of proved or generally recognized shortage could be satisfactorily handled.

It was apparently the custom for the lace manufacturers to advance money to the men they imported to pay their entrance fees to the union. During 1913 a request from one factory was sent to the executive board of the union asking them to reduce the entrance fee in case they imported men. They claimed it was an expense from which the firm received no benefit, because whenever a man became dissatisfied with his job he invariably left the shop and often did not reimburse the firm for the expenditures. The board decided, however, to adhere to the rules on the matter.

THE CLOSED SHOP

In 1905 the union added to its constitutional object of securing fair wages and regulating the relations between employer and employed the following: "The object of this organization is to secure justice and fair pay and to organize thoroughly the lace trade in the United States." Thorough organization sooner or later means the closed shop. The importance of this issue as a cause for strikes is evidenced in the fact that one-third of the local strikes called by the union during the period prior to 1919 were for the enforcement of the closed shop. Strikes called for such reasons as, "posting of new shop rules without consultation of shop committees," "refusing to reinstate a discharged man," and refusing to recognize the union caused an additional one-third of the strikes. In this estimate early strikes for which the records state no cause and stoppages which included less than all the members in the shop have been excluded. Even so, it has sometimes been extremely difficult to extract from the various union records consulted the underlying causes of the strikes. The secretaries writing the minutes were usually more interested in reporting the meetings, negotiations, and final settlement. It is conceivable that they and the men affected at times did not know the underlying causes of the dispute. The lace-curtain weavers have never called a general strike; the one general strike in the trades was called by the Levers lace weavers in 1917 to obtain a wage increase. This and one or two local strikes called against a reduction in wages have been the only strikes called locally or nationally on the wage question. The lace workers in both trades, like many other older craft unions, have been willing to take reductions in wages or to go slowly in forcing increases rather than give up their power in matters of shop discipline and shop rules.

The lace-curtain branches were the first to obtain the closed shop. By 1902 a uniform wage scale was in effect throughout the trade, and the closed shop had been obtained in 9 of the 11 mills then making lace curtains. At the present time the lace-curtain section maintains the closed shop in the weaving departments of 9 plants which employ over 80 per cent of the lace-curtain workers. In the three factories which refuse to employ union men, prolonged and unsuccessful struggles took place in an effort to secure recognition of the

union. Their lack of success is attributed by some of the members to hasty action in calling strikes which ended disastrously; to the bitter opposition of certain employers to organized labor; to inattention to the problem on the part of the union officials; and to advantages given by the employer, which prevented the union's getting a good start.

Attempts to organize the Levers men were not so successful at first, but after the importation of Levers machines and the incoming of large numbers of Levers workers in 1910, a second and more thorough organizing campaign was begun which met with great success. Several new Levers branches were formed; the membership of the organization doubled; and the strength of the society became so great that it was in a fair way to obtain the closed shop for all Levers workers as well as curtain men. The closed shop had always obtained in those plants in Pennsylvania where Levers men worked in the same mill with curtain men, and hence had uniform conditions. In 1917 a general strike of Levers lace weavers was called to force a uniform price list and an increase in wages, which ended disastrously and ultimately split the union. In certain districts where the strike was lost the Levers section had difficulty in gaining a foothold again, and the Levers men are at the present time working for a uniform price list and the closed shop, where this has not yet been obtained. The Levers section is thus less powerful than the curtain section, because it controls a smaller proportion of its potential membership.

SUMMARY

In summary it may be said the weavers in the lace-curtain and lace industries were placed in a strategic position in bargaining with their employers because of certain economic factors in the industry—the scarcity of trained labor and the necessity of importing men or of training apprentices to the required skill. During periods of unemployment and a threatened oversupply of labor this position was strengthened by artificial restriction through regulation of apprenticeship, transfer-card requirements, and high initiation fees. A tradition of unionism in Europe and the fact that there was a small number of lace-curtain plants localized in one State gave the curtain operatives added advantages. That a lesser degree of organization and control was secured in the Levers trade is attributable primarily to the bitter opposition and active warfare of certain Levers lace manufacturers, to the scattering of local branches away from organization headquarters, and to a shorter experience in collective bargaining in this country. An added difficulty arose in the problem of language, for certain of the Levers branches had to conduct business in French as well as English. Finally, a larger number of financial reorganizations in the lace trade, because of its dependence on fashion and its economic disadvantage in competing with foreign producers, has resulted in breaking up organization among the workers to a greater extent than in the more stable lace-curtain trade.

Chapter IV.—STRUCTURE AND GOVERNMENT OF THE UNION¹

STRUCTURAL HISTORY OF THE UNION

By taking measures to control the entrance to the trade and to secure the worker's tenure in the job, the lace operatives adopted the policies of craft unionism. The predominance of the skilled groups in the industry and the unbridged gulf between the skilled and unskilled as regards their economic position led to the growth of a strong craft union. The bargaining power of the group was strengthened by good discipline within the ranks of the organization and by a centralized administration; there was, however, a degree of local autonomy which increased until it eventually vanquished the centralized management. In the structural development of the union, stormy debates arose over the inclusion of separate crafts, particularly the Levers weavers, and later of the unskilled workers in the auxiliary departments of the mills. During the struggle the whole issue of craft versus industrial unionism was brought up and fought out bitterly by the separatists. In the resulting structure and government, craft unionism won a precarious victory at the expense of several groups in the industry.

From the beginning of their organization the membership of the Amalgamated Lace Operatives' Society has included more than one craft—the lace-curtain weavers, the plain-net weavers, and the readers and correctors of lace-curtain patterns. During their historical development other groups have been amalgamated with them for varying lengths of time. The American Federation of Labor charter granted to the Society of Amalgamated Lace Curtain Operatives of America in 1894 gave "jurisdiction over all workers within a lace mill." Five years later the Brooklyn Levers Society, the first and only separate organization of Levers weavers in the country, asked for federation or amalgamation with the curtain weavers. This request was held in abeyance and was automatically dropped in 1901, when the Brooklyn society was broken up as the result of strikes and the admission of part of its membership to the Wilkes-Barre local of curtain weavers. In the 1902 convention of the union, it will be remembered, the word "curtain" was dropped and membership opened to Levers weavers; but a proposal to have one member of the executive board represent the Levers trade was voted down.² An early campaign to organize the Levers weavers in the Rhode Island district followed this constitutional change, but failed after

¹ Unless otherwise noted, data are from records of the Amalgamated Lace Operatives' Society: Convention proceedings; and Minutes of the executive board.

² In 1903 and 1904 the draughtsmen applied for admission to the reorganized society and were admitted by a ballot of the membership. Although the draughtsmen had had a beneficial society previous to this time, they had never been recognized as a union, and several employers now refused to recognize them. In the course of two years, however, they withdrew from the lace operatives, claiming that they had not received just treatment from the branches.

a prolonged strike. The question did not arise again until the importation of Levers machines in 1910 brought over many workers from the lace centers of Europe. The disastrous result of the first organization campaign caused many curtain members of the union to feel that it was useless to attempt another campaign. In Philadelphia, the only local branch where both lace and lace-curtain mills were established, the new Levers workers were admitted to the branch, and later formed a separate section in order to facilitate the execution of trade business. An organization campaign was started in New England despite the sentiment of the curtain members, but progressed slowly, and communications from the curtain branches to the executive board during the next few years indicate impatience with the results. In the course of a few years, however, several lace mills were organized, and New England Levers branches began taking part in the general business of the society. Lockouts or strikes were common, and the difficulties arising in the maintenance of newly acquired rights of joint control of working conditions kept executive boards busy with negotiations and settlements. This difficulty was increased by the attitude of several New England manufacturers, who whenever an opportunity offered, attempted to reintroduce the open-shop system. The frequency of strikes kept the Levers branches financially embarrassed and hindered their growth.

With the increase in the Levers membership the question of a uniform wage scale arose, since great variety obtained in the wage or price lists used in different mills and different localities. Eight years of negotiation failed to settle this difficult question. A first attempt to get the manufacturers to meet with the union to draw up an American price list in 1910 was a "dismal failure," due to the fact that many of the manufacturers did not attend. The majority of the Levers weavers preferred being paid according to the 1894 Nottingham "Levers card," but disagreements arose over the basis of classification of goods. Few manufacturers paid strictly according to this card, although several had agreed to use it as a basis of payment, with certain modifications. The modifications were in the form of reductions in the rates for certain classes of goods or widths of machine and were not approved by the branches where strict adherence to the card was maintained. These reductions had been granted in an effort to obviate forcing the issue of payment according to the 1894 card at a time when the union was not in a strategic position to do so. It is interesting to note that back in 1905 in England the old Nottingham Levers price lists had been radically changed by an award of Lord Askwith in the arbitration of a Nottingham labor dispute. In the statement of this award the reasons given for the changes were practically the same as the complaints made by the American manufacturers about the impracticability of the card. Under the 1894 card the price was considerably increased where extra bars were used and progressively raised for the fine gauge and wide machines, so that under these conditions the manufacture of certain classes of lace was virtually prohibited and obsolete types of machinery and cheaper grades of lace were favored disproportionately.³ The Nottingham workers had agreed to abide by the

³ Great Britain. Board of Trade. Proceedings under the conciliation act of 1896. Sixth report, 1905, p. 22.

award of the arbitrator and did so, although some claimed that it cut their earnings a third. However, when the question of an American price list arose, the Nottingham workers who had come to the United States reverted to their preference for the 1894 card, for the sake of the high earnings possible under it. The machines in this country, however, were practically all of modern construction, and the manufacturers attempted to introduce a wide variety of fine and cheap laces, which were inadequately covered by the 1894 card. Levers price conferences were held during 1914 and again in 1916 and 1917, with a view to establishing a new and more satisfactory basis of remuneration. But at each meeting the manufacturers would present a scale on a basis that the union would not accept and the manufacturers would not accept the basis of the list presented by the union. Finally the union became wearied in this matter of continuous negotiation with no settlement, and in the summer of 1917 attempted to force the issue of payment according to the 1894 card. A strike involving all of the Levers branches followed, which lasted for several months. Local settlements were effected with some employers, or through Government mediation where war contracts were involved, but the main issue of the strike was lost. Several branches were broken up, and it has taken years to retrieve the ground lost during this strike. The Levers section of the union is still working to obtain uniformity of payment according to a revision of the 1894 card.

The disastrous results of the strike in 1917 brought to a head a movement for separation of the Levers and curtain branches. The Levers branches had grown to such an extent just prior to the general strike that in conventions they threatened to usurp the balance of power which had long been held by the curtain branches. Action on several issues in the 1916 convention, which were of interest to the Levers members, brought out the fact that their numbers were sufficient to force satisfactory adjustments. Considerable jealousy and ill feeling appears to have existed at times between the two groups and this now came to the front. The financial drain of the strike had been great and many of the curtain members were tired of carrying along a group in the organization which seemed to be constant dead weight. This attitude bears out the contention of several writers that the varying interests of craft unions tend to weaken their organizing zeal. A special convention was called by one of the curtain branches in the fall of 1917 to protest against the action of the executive board in calling the strike and to ask for separation of the two groups. Other conventions followed this, in an endeavor to bring about a settlement of differences, at which feeling ran high. The Levers members felt that they were being abandoned at a critical period in their history; and the curtain members felt that they should have been independent previous to this time. The Levers members favored a constitutional change which would keep the organization intact; the curtain members favored a loose federation, some being willing to have a complete split. The employers were not uninterested in this new phase of the union's political situation and are reported to have encouraged it. The controversy was bitterly fought, but the curtain members pushed through their policy of federation, and in 1919 a working basis of reorganization was reached.

INDUSTRIAL VERSUS CRAFT UNIONISM

Another question of great importance to the structural development of the union came to the fore during this period of organization and growth of the Levers branches. The several skilled crafts in the society had been welded into a strong central organization with uniform rules and policies, although each craft had a separate price list and special trade practices which were peculiar to its work. Since there was a possibility of transfer from one craft to the other because of similarity in the work, and this transfer was more easily accomplished than promotion from unskilled to skilled work, the union may be considered a craft rather than an industrial union, in structure as well as policy. It was not until the 1912 convention that the question of organizing the unskilled workers in the preparatory and finishing departments was raised for discussion. At this time the whole issue of craft versus industrial unionism was thoroughly aired and discussed; but the proposal met little encouragement from the older members of the union. In 1914 the brass-bobbin winders of Philadelphia were organized as a federal labor local, with a charter from the American Federation of Labor. In 1919 this union was opened to all auxiliary workers in Philadelphia. A second federal labor local of auxiliary workers was established in Wilkes-Barre in 1916-17, which was successful in securing a large membership from all occupations. In the 1916 convention of the lace operatives, the question of organizing the auxiliary workers was again brought forward. At this time the proponents of organizing these employees praised the advantages of industrial unionism. Many Levers members maintained that their strikes would have ended differently if the auxiliary workers had been organized. Opponents of the plan complained of the extreme fluctuation and instability to be expected from young people in the less skilled occupations as compared with their own crafts. The result of the convention's discussion was the election of a committee to handle the problem, but it accomplished little, because of the inertia of the members.

JURISDICTIONAL DISPUTE WITH UNITED TEXTILE WORKERS

The question of the organization of the auxiliary workers was further complicated by a jurisdictional dispute with the United Textile Workers. Various groups of auxiliary workers had from time to time affiliated with the United Textile Workers, but no strong or permanent organization was to be found. The question of jurisdiction first arose in 1915, at a time when the Amalgamated Lace Operatives' Society had a constantly growing membership and was coming into prominence as a textile labor organization. The Levers lace makers in a Brooklyn factory had gone out on sympathetic strike with the warpers of the shop, who belonged to the warpers' local of the United Textile Workers. As a sympathetic strike was unconstitutional, attempts were immediately made by the Amalgamated officials to bring the strike to a close. The general secretary was successful in bringing about a satisfactory settlement

which included the warpers; but it was impossible for any of the executives of the United Textile Workers to be present at the settlement. The latter organization took exception to the way in which the matter had been settled and wrote that there ought to be some understanding between the two societies, suggesting amalgamation. Then the lace operatives sent a delegate to the 1916 convention of the American Federation of Labor to have a line of demarcation drawn between the two unions; but the United Textile Workers urged amalgamation instead, and nothing was accomplished. In the same year a local of threaders which had been organized by the United Textile Workers in Williamsbridge broke up after a strike, in the settlement of which the Amalgamated Lace Operatives' Society had been of assistance. In this instance the United Textile Workers claimed that the disruption of the local had taken place through the instrumentality of the lace weavers.

In an effort to bring about an understanding on the jurisdictional questions involved between the lace operatives and the United Textile Workers, and also with the mule spinners, who were likewise in difficulties with the United Textile Workers, the American Federation of Labor called a special conference in Boston in the summer of 1916. Although the mule spinners had at one time belonged to the United Textile Workers under a temporary agreement, the lace operatives had never been affiliated with that body and had a charter senior to theirs from the American Federation of Labor. The charter of the United Textile Workers gave them jurisdiction over all textile workers; and the charter of the lace operatives gave them jurisdiction over all workers in a lace mill. Clearly some agreement was necessary in view of the conflict. This conference proposed, after prolonged discussion, that each union continue its organizing campaign and then confer on jurisdiction; but this was not acceptable to the executive council of the American Federation of Labor. In a later conference the mule spinners and lace operatives proposed a textile department like the mining or building trades departments in the Federation, and the retention of their national charters; but the United Textile Workers desired amalgamation. The question remained in abeyance for a year or so, and then was settled by an ultimatum from Federation headquarters. The lace operatives and mule spinners were given a certain period of time in which to merge with the United Textile Workers or lose their charters. Both the lace workers and the mule spinners were suspended from the American Federation of Labor in 1919. This was the year in which the reorganization of the lace workers' union took place, and the scattered groups of organized auxiliary workers asked admission to the Amalgamated Lace Operatives' Society as a separate section under their new constitution. The curtain delegates to the convention considering this matter were reluctant to accept them, but the Levers delegates were in a majority and the constitution of the auxiliary workers was adopted as part of the constitution of the new order. The question of jurisdiction was thus settled by the "outlawing" of the lace operatives, and with them the auxiliary workers over whom the dispute had arisen.

PRESENT ORGANIZATION OF AMALGAMATED LACE OPERATIVES' SOCIETY

Although the reorganized union of lace operatives retains the name "Amalgamated," it is a federation of a number of crafts and occupations divided into three sections—the curtain section, the Levers section, and the auxiliary section. The first two are composed entirely of the skilled men who operate the Nottingham lace-curtain, Levers, and plain-net machines. The auxiliary section, on the other hand, is composed of both men and women working on semiskilled and unskilled operations, the majority of workers being women. This section claims jurisdiction over all workers on auxiliary or finishing processes in the lace mill.⁴ Each section is an independent self-governing unit, carrying out the principle of decentralized administration. The organization is unique in that it is partly an industrial and partly a craft union. In this way the issue of craft versus industrial unionism was straddled rather than solved.

A general convention, composed of five delegates from each section, meets at the time of the section conventions to settle any problems which affect all sections. The most important problems concern conflicts of jurisdiction between sections. An executive committee composed of the president and secretary of each section, together with a general secretary and a death-benefit secretary elected by the membership at large, attend to routine business between conventions. In addition, the committee has charge of organizing campaigns in all the sections and must sanction the calling of all strikes (within a time limit of 24 hours). The convention is the highest tribunal in each section, and passes upon all important constitutional changes and business affecting each group. Amendments to the general constitution, however, require the approval of at least 10 per cent of the members of each section. A section executive committee carries on the routine business of the section between conventions, acts upon all appeals from the branch committees, and has full control of all trade matters such as wages and hours, subject to a referendum vote of the membership of the section. The general meeting of the local branches is the legislative body for local questions, and the branch trade committee carries out the routine business of the local, acting upon applications for membership, transfers, grievances referred to it from the shop committees, and questions of dues, benefits, and local policy. In each shop, there is a section shop committee whose work in the enforcement of shop rules is highly important, and will be discussed in greater detail later. There is also a shop advisory board composed of members from all the sections working in the mill, to act in the settlement of any dispute involving more than one section. The most recent convention of the union (June, 1924) formally approved of the principles of industrial unionism, but the limited centralization of power as well as the union's traditional craft policies make the organization essentially a craft and not an industrial union.

⁴One group of women menders refused to join the auxiliary section, and are hence outside the society's jurisdiction. They include the menders of Philadelphia and Chester, who have for many years maintained a protective and beneficial society, not connected with any national labor organization, through which they bargain collectively with their employers, and even carry on strikes.

Although the auxiliary workers were the last group to join the lace operatives, they now outnumber either of the other two groups. The number of members in the Levers section has steadily declined since the reorganization of the union in 1919, as a result of severe trade depression during 1923 and 1924, and partly as a result of the weakness of the new section in 1919. The number of active members in the society in December, 1923, totaled 1,688, of whom 772 were auxiliary workers, 539 were curtain workers, and 377 were Levers workers.⁵

A large amount of local autonomy has always persisted in the union, and is one of the most characteristic features of the union's historical development. Prior to 1914 this was the result of inertia or lack of power in the central management; since that time it has been a well-defined policy. The lack of power in the central management in the early history of the union is well illustrated by the fact that strike breakers from one branch of the union came into another branch which was waging a strike against reduction in wages. The executive board sent a deputation to "persuade them not to work"; but its persuasion was of no avail. Needless to say, such a condition of affairs was not long lived, and the central control became strong enough to prevent such action in the future. However local branches were given considerable leeway in the management of their own affairs. At the present time this is illustrated in the constitutional provision of the by-laws of the curtain section, Article VII, section 3:

Each branch shall manage its own affairs and be imbued with power to place any member or number of members on the funds of the section in any case involving rack price, hours of labor, or individual rights of members; provided, however, that the executive committee has been notified of the contemplated action. In any case wherein the placing of the entire membership of the branch on the funds of the section is concerned, a two-thirds majority vote of the membership of said branch shall be necessary before doing so. No branch shall be allowed to accept a reduction in the rack price or the rate of payment for time work without a ballot of the members of the section.

STRUGGLE FOR CONTROL WITHIN THE UNION

The struggle between the locals and the national executive board for control has been manifested in such questions as the constitutional make-up of the executive board, the use of democratic measures of legislative control (such as the referendum), and especially the control of strikes. This last problem has been the central battle ground in the struggle for control in most unions.⁶ Hasty action on the part of local officials, who do not know general conditions so well as do the national officials, often leads to disastrous strikes, which strong national control would have obviated, and to an attempt to secure that control for the future. While the executive board of the lace operatives had power to settle strikes, the local branches could initiate them without its sanction. It did, however, control the disbursement of strike benefits, and thus indirectly exercised a measure of control over the calling of strikes. Nevertheless, a num-

⁵ Figures furnished by Mr. William Borland, the general secretary, 1924.

⁶ Johns Hopkins University. Government of American Trade-Unions, by T. W. Glocker. Johns Hopkins University Studies, vol. 31, 1913, p. 109.

ber of strikes were well under way before the board's approval was obtained and might never have been called if its previous approval had been necessary. During the nineties and the first part of the decade following, the board's settlement of several strikes met with the disapproval of the locals involved, and in the 1904 convention a ruling was made requiring the presence of a branch representative in the negotiations for settlement in all strikes. For many years after the society was organized, the convention met semiannually and acted as an executive council as well. Later the executive board was established as a group distinct from the delegates to the convention. It was composed of members from all branches; but the inconvenience of carrying on business with a scattered membership led to later proposals to have all national officers reside in the same city. Since the largest local was in Philadelphia, it was inevitable that the officers would eventually be elected from that city, with headquarters established there. For the major part of the union's history since 1900, the headquarters of the national officers have been in Philadelphia. As a result, a feeling has often been expressed that the executive board members were unduly influenced in their action by the opinion of the members of the Philadelphia branch. This, in turn, led to a curtailment of the board's powers and to an increase of local autonomy whenever the opportunity offered. For a brief period from 1914 to 1919, greater centralization of power was effected through the election of three national officials, known as the board of managers, to carry on the executive business of the organization. This took place at a time when many unions were experimenting with centralized control. However, the larger powers exercised by the board of managers aroused opposition in some of the locals, and at the time of the reorganization of the union the general tendency to decentralization again manifested itself in the section system. The use of the referendum for all important constitutional changes has been characteristic of the union's policy from early times to the present and has recently been extended to questions of wages and hours. The methods have in this respect been more democratic than those of many craft unions where such questions are settled in convention, and show the strong sentiment of the members for democratic control of official policy.

There has also been a struggle for power between the small and large locals—a customary feature of trade-union politics—which has manifested itself in the provisions with regard to the basis of representation and methods of voting at conventions. In the early conventions each branch was entitled to one delegate; but with the growth in the membership of branches where more than one shop was located there came a movement for greater representation for the larger branches. The present basis of representation has been in existence for some years and allows a ratio of 1 delegate for each 50 members or portion thereof—a ratio which favors the smaller locals. Numerical voting rather than “block” voting by branches in conventions was postponed until 1912 by the combined strength of the smaller locals. Since that year a delegate may call for a numerical vote upon any question, and a combination of the Philadelphia branch with any one of the small branches is sufficient to constitute a numerical majority of the curtain members.

The general policy of the union toward allowing great local autonomy was a means of strength to the older locals, but a source of weakness to the new. These were left to shift for themselves after they had received charters and had been instructed in the general business of running a local union. One small branch far from headquarters wrote to the executive board in 1918 discussing a few minor complaints, and then remarked that there had not been a deputation from the board to their branch in 13 years. In the same year another branch which was threatened with disruption claimed that "if the board would give more time to visiting the branches, better conditions would exist throughout the amalgamation." These two statements throw considerable light upon the difficulties facing new local branches in a union in which the policy of local autonomy was so strongly emphasized.

In cases of unconstitutional action or opposition to general union policy on the part of any local branch the executive board has promptly threatened withdrawal of charters or severely reprimanded the offenders. Sympathetic strikes are unconstitutional, and participants are entitled to no strike benefits. However, in the few cases in which such an issue arose, special grants were made which partially offset the loss of strike benefits. If a branch refused to issue a trade ballot or to obey an important order from the board it was reprimanded. Strike benefits were withheld if men went out on strike in the face of an existing agreement with the firm to handle a disputed question in another way. When one local branch refused to open negotiations with a firm on a certain price question, it was ordered to do so on penalty of withdrawal of its charter. In this way the executive board exercised disciplinary measures, but these were seldom necessary.

Members of the union have always had the right of appeal from decisions of a branch trade committee to the executive board or to the convention. In recent years most cases of appeal have been settled by the executive board. The appeals usually concern fines for the breaking of local rules, action "detrimental to organized labor" in strikes, applications for membership, and dropping of names from the rolls for nonpayment of dues. On the whole, there have been few such appeals from the trade committees to a higher tribunal in the 30-odd years of the union's history. This, like the infrequent use by the board of disciplinary measures on recalcitrant locals, illustrates the degree of good discipline existing in the union. The union's control over entrance to the trades and working conditions offered a high degree of security to the worker in return for conformity to union policy. Good discipline is an outstanding feature of the union's government.

ATTITUDE TOWARD OTHER UNIONS

One feature of the general policy of the union is of significance in interpreting the history of the union prior to the World-War period. We may call it, for lack of a better name, the policy of exclusiveness. It is manifested in the general lack of cooperation by the society with the labor movement in other industries. Opposition to this attitude first appeared in the 1910 convention when it was proposed that the society affiliate with the Pennsylvania Federation

of Labor, and that a delegate be sent to the American Federation of Labor convention. However, both of these proposals were rejected. In the 1914 convention several delegates spoke against the exclusive policy of the union and in favor of greater participation in the general labor movement. Although a charter member of the American Federation of Labor the society sent no delegates to the Federation conventions until the jurisdictional dispute with the United Textile Workers arose. From that time on, various branches of the union took greater interest in local labor movements, and with the reorganization of the society in 1919, the policy of exclusiveness seems to have died a natural death. Many of the branches have recently undertaken educational work and are affiliated with local labor colleges. In addition, the union has taken a greater interest in the problems of textile labor organization in general.

When the lace operatives lost their American Federation of Labor charter because they refused to merge with the United Textile Workers, they joined the ranks of the "outlaw" textile unions, of whom there were a goodly number. Early in 1921 the "outlaws" combined into a loose federation known as the Federated Textile Unions of America. This organization included the lace operatives and mule spinners; the American Federation of Textile Operatives (composed of cotton workers in the New Bedford, Fall River, and Salem district, and in Maine, who had split off from the United Textile Workers in 1912), the Amalgamated Textile Workers (a group that had been outlawed since its rise after the Lawrence strike for the 44-hour week in 1919), and certain independent craft and industrial unions.⁷ In 1923 the total membership of the Federated Textile Unions was reported to be about 17,000, while the membership of the United Textile Workers was reported to be about 60,000. The Amalgamated Textile Workers and the Associated Silk Workers of Paterson, which were the only industrial unions in the group, withdrew from the Federated Textile Unions in the spring of 1923. In a statement to the press of the reasons for their withdrawal, the cleavage between the craft and industrial unions in the textile field is clearly drawn:

This action was taken because of a profound feeling that the high aims and purposes of the Amalgamated Textile Workers as an aggressive industrial union, radical in principle and spirit, can in no way be served by contact with the Federated Textile Unions as at present constituted. * * * The Amalgamated was never very sanguine about the possibility of effectual cooperation between radical industrial unionists and craft unionists of the extremely conservative school. * * * The federation plan merely provides an arena for political jockeying. With 45 per cent or more of the textile workers unorganized, that is a business for which the Amalgamated has no stomach. * * * It is not true to say that the Federated Textile Unions are moving toward amalgamation of all textile unions. The Federated has encouraged local separatism, and the representatives of some of the more important affiliated unions (in point of size), far from showing that they have learned anything from events in the world of labor, have openly condemned industrial unionism and asserted the superior merits of craft unionism.⁸

⁷ These were the tapestry carpet weavers, the beamers and twisters, the turkish towel weavers, the art square weavers, the Amalgamated Brussels Carpet Association, the Associated Silk Workers of Paterson, the New York Amalgamated Knit Goods Workers, and the Amulet Spinners' Association. (Labor Age, May, 1923, p. 5.) Recently the National Loom Fixers have joined the organization; but the beamers and twisters, the turkish towel weavers, and the Amalgamated Knit Goods Workers have withdrawn. The art square weavers and the Amalgamated Brussels Carpet Association are temporarily out of the organization.

⁸ New Textile Worker, New York, April-May, 1923, p. 6.

With the withdrawal of the industrial unionists from the ranks of the Federated Textile Unions, more homogeneity was found in the aims and purposes of the constituent unions, and in the summer of 1923 several steps of importance to the whole textile labor situation were taken. The United Textile Workers had again brought up the question of jurisdiction with the federal labor locals of the auxiliary section of the lace operatives, who were in the anomalous position of belonging to an "outlaw" organization, yet possessing charters from the American Federation of Labor. A movement was initiated by the lace operatives in June, 1923, to seek a solution of the differences between the United Textile Workers and the Federated Textile Unions.⁹

A series of conferences has therefore been held between representatives of the United Textile Workers and the Federated Textile Unions in an endeavor to bring about unity among the craft unions in the textile field. The major points at issue between the two groups are: First, a desire on the part of the Federated Unions to have a constitutional basis which distributes some of the power, now centralized in the United Textile Workers' council, through district officers. This does not meet the approval of the United Textile Workers. Second, the amount of the per capita tax and particularly the question of control of the funds raised by it. One interested observer has said that "One side wants to count the cost before it comes in, and the other side wants everyone to get in, and then count the cost." And third, the method of financing strikes. The United Textile Workers maintains a defense fund and commissary department, but guarantees no strike benefits. The Federated Textile Unions of America, on the other hand, guarantee strike benefits and raise funds by assessments.

As yet the negotiations between the two groups have effected no settlement. The differences have been referred back to conventions for legislative action. If the Federated Textile Unions amalgamate with the United Textile Workers, the line between the conservative craft unions and the industrial unions will be even more sharply drawn.

It has now become a commonplace in trade-union literature that the major difference between craft and industrial unionism—between the "old" and the "new" unionism—is primarily one of philosophy and program rather than structure and government. Joint control of working conditions and all that this implies in the nature of trade agreements are the goal of the craft unionists, but to the industrial unionist, joint control is merely a means to an end. The end is workers' control. The lace operatives by their policies as well as by their form of organization, have aligned themselves with the craft unionists, and their program is therefore centered on questions of joint control of working conditions.

⁹ American Lace Worker, Philadelphia, August, 1923, p. 2.

Chapter V.—PRICE LIST AND DEVELOPMENT OF COLLECTIVE BARGAINING.¹

ORIGIN OF PIECEWORK SCALES IN THE INDUSTRY

There have been more interesting developments in collective bargaining in the lace-curtain industry than in the lace industry in this country. To trace its history one must go back to old English piecework price lists that were established in the early years of bargaining over machine rates. With the limited material available in the United States it has been difficult to trace the English lists, but it is certain that a revised scale of 1869 became the basis for further revisions in 1884, 1889, and 1897 in England. The list was changed to suit American conditions in 1900 and is the present basis of collective bargaining over wage rates. The general principle of remuneration established in these scales has never been changed. The basis of payment is the price per rack—the standard unit of production—for a machine of standard width and gauge in all classes of goods. Variations from this standard machine in width or gauge call for fixed differentials above and below the standard price. The basis of classification of goods is difference in the equipment of the machine, the rate varying by fixed amounts as the equipment becomes more complicated and the goods more elaborate. Variations in the kinds of yarn used and other contingencies are provided for in the price list, which has been elaborated as collective bargaining has developed. While some piecework scales are voluminous lists, giving a price for each product made (as in the glass-bottle industry), or for major differences in the conditions under which work is done (as in the district scales of the coal miners), the lace scales are based on a standard operation or process. In this respect the lists resemble wage scales in other textile industries where uniformity of working conditions prevails.²

· OPERATION OF LACE-CURTAIN MACHINE

The general basis of payment in the lace-curtain (and Levers) trade has remained the same throughout a century of technical development. This means that the central operation of the industry, the working of the lace machine, has remained the same with but minor modifications which have not changed its essential principles, and that the methods of production built up around the machine have continued as at first.

An understanding of the operation of the lace-curtain machine and of the work of the weaver is essential to an understanding of

¹ Unless otherwise noted, data are from records of the Amalgamated Lace Operatives' Society: Price conference reports; Minutes of executive board; and Decisions of joint technical committee.

² Similar price lists have been used in the silk-ribbon and carpet industries in the United States, and in all branches of the textile industry in England.

the price list and will therefore be briefly described. The machines are massive frames varying in width from 120 to 440 inches and weighing about 12 tons. Although the construction of the machine is complicated, the mechanical principle on which it is based is simple. The essential feature is that several strips of lace curtains or nets are made simultaneously across the width of the machine, by the shifting of vertical warp and spool threads to right and left of swinging bobbins at each movement of the machine. The twisting and traversing of threads to form the plain or patterned meshes takes place in what is known as the "well" of the machine, a space about one inch wide between the front and back comb bars in which the bobbins swing back and forth with a pendulumlike movement. Lace fabric, in contrast to other textile fabrics, has a twisted mesh in which each thread works independently of every other thread. In contrast to the ordinary cloth loom which has but one weft thread for the whole of the warp threads, the lace-curtain machine has a separate weft or bobbin thread for every warp or beam thread, and the filling in is done by spool threads. Upon the number of bobbin carriages passing back and forth in an inch of width along the machine depends the gauge of the machine. A 12-point machine has 12 bobbin carriages to the inch of width, and the lace produced has 12 meshes to the inch of width of the goods. The gauges are not interchangeable. Cotton yarns used in the production of lace curtains are rarely finer than 98/2, and the greater part are 40/2 to 78/2.

The working parts of the machine are as follows:

(1) The brass bobbins. These are thin disks of rolled brass upon which a fine grade of imported yarn is wound under heavy tension. They are fastened into thin steel carriages by means of springs and the carriages pass to and fro in grooves from front to back comb bars. In a 12-point machine, 324 inches wide, there are 3,888 bobbins simultaneously moving back and forth along the width of the machine.

(2) The warp and beam racks or reels. These have guide bars above them in the well of the machine through which their threads pass. A rack at the back of the machine contains the spools, the threads of which also pass into the well through the eyelets of a guide bar. In a 12-point machine, 324 inches wide, there would be 3,888 warp or beam threads, 3,888 spool threads, and if an extra beam were used, 3,888 more beam threads, making, with the weft or bobbin threads, a total of 15,552 threads. The lateral movement of the bars is controlled by cams at the end of the machine.

(3) The Jacquard apparatus. This introduces variety in the pattern being made, like the Jacquard of a cloth loom, and is at the top of the machine. Over the Jacquard cylinder punched pattern cards revolve, and, by a suitable mechanism, raise or lower needles which are attached by a harness of long "strings" to the "jacks" in the well of the machine, stopping some threads, and permitting others to traverse the distance required by the pattern.

(4) The "jacks." These are thin steel strips which have two motions, controlled by bars known as the "trick and jack bars." One motion is a "shogging" or jogging movement from left to right

and the other is a backward and forward motion to intercept the threads, according to the pattern.

The movements of the machine take place in the following order: First, the jack bar "shogs" one "gait," which is the distance between two bobbin carriages in the machine; then the spool bar traverses from left to right, those threads moving which are allowed to do so by the jacks, whose position is determined by the pattern cards in the manner just described; then the warp bar traverses, the threads of which may or may not, according to the type of goods being made, be controlled by the jacks; finally, the bobbin carriage passes through from front to back or back to front, tying into position the previous movement of threads. Threads may be shifted to right or left a distance of from one to seven gaits, although the latter distance is rare. The distance traversed will depend upon the coarseness or fineness of the pattern, and the amount of filling in to be done. As the curtains are made, they pass up in front of the weaver and are rolled on a "porcupine" roller, the points of which keep the mesh of the lace in perfect symmetry.

It is from the twisting of the threads in the machine that the lace maker received his original name of "twist hand". His work consists in threading the machines (with the aid of boys), which means putting thousands of warp, spool, and bobbin threads through the eyelets in their respective guide bars. The pattern cards must be adjusted on the Jacquard cylinder, and the strings which connect the cylinder with the jacks in the well of the machine must be attended with an eye to the effects of the weather, since their tension is an important matter in the working of the machine. The weaver must oversee the general operation of the loom as well as the product he is making, and it is considered a point of pride not to require the services of a fixer for months at a time. He must watch the threads to avoid bad breaks, to make sure that the proper counts of yarn with no defects are being used, that the pattern cards are working properly, and that the proper gaits and "quality" are being made. "Quality" in the making of lace goods refers to the number of inches to the "rack" and is governed by the speed of the porcupine roller. When making good "quality" the roller moves slowly, allowing a great number of motions of the machine for the quantity to be made. The "rack" is the universal measure of production of lace goods, meaning 1,440 motions of the machine, one motion being a movement of the bobbins in either direction. The standard quality of 20 motions per inch produced gives a yard of goods to a rack. It will thus be seen that the output of machines may vary from 80 to 250 machine yards a day depending on the quality. On a machine of average width, making average quality, 315 square yards would be produced daily. A matter requiring considerable skill on the part of the weaver is the adjustment of the tension of the threads to make a perfect product, and in certain classes of goods like combination nets the adjustment of tension is the most important feature of production. Weather conditions are as important here as in the adjustment of the "strings". Care must further be taken by the weaver to run the bobbins out as nearly as possible together, since every empty bobbin means a break in the lace which has to be mended.

Although all the bobbins pass back and forth an equal number of times, less yarn is required to wrap around the warp alone than around a couple of filling threads and a warp, so that some bobbins run out before others and must be replaced.

Considerable waste of expensive bobbin yarns can be avoided by the careful weaver. The thread on one bobbin is sufficient to last for 40 to 150 racks, depending upon the fineness of the yarn. When the bobbins are empty, boys rewind them and place them in their carriages; but before the weavers use them again, they inspect them to make sure that the springs are in place and have been adjusted so that the bobbin yarns will have the proper tension, and that the bobbins do not bulge beyond the required fineness of their gauges. After being pressed into shape the bobbins are replaced in the machine. The larger the machine, the finer the gauge, or the more complicated the working apparatus, the more arduous is the work and greater is the responsibility of the weaver. A greater number of threads in the machine, or more delicate threads, increases the liability of breakage and requires greater dexterity and speed. The worker is therefore entitled to greater compensation, and it is upon this principle that the piecework price list was evolved.

LACE-CURTAIN PRICE LIST

The question of a universal price card was first discussed at the July convention of the union in 1893. At that time Scranton prices were highest, Wilkes-Barre prices were lowest, and Philadelphia prices were midway between these limits. Attempts were therefore made to have the Philadelphia list accepted universally. It was not until 1900, however, that a list was drawn up which was accepted everywhere. The list, which is given in Table 6, below, provides for a standard loom of a gauge of 10 points and width of 324 inches.

TABLE 6.—REVISED LIST OF PRICES, 1900, FOR LACE GOODS MADE ON THE CURTAIN MACHINE

Type of product	Rate (in cents) per rack on machines of specified gauge and width									
	6-point		7-point, 324 inches	8-point			9-point, 324 inches	10-point		
	324 inches	360 inches		300 inches	324 inches	360 inches		272 inches	300 inches	324 inches
Ordinary, 3-gait.....	6½	6¾	6½	6½	6¾	7¼	7	6¾	7	7¼
Ordinary, 4-gait.....	6¾	7¼	7	7	7¼	7¾	7½	7¼	7½	7¾
Double action, 3-gait.....	6¾	7¼	7	7	7¼	7¾	7½	7¼	7½	7¾
Double action, 4-gait.....	7¼	7¾	7½	7½	7¾	8¼	8	7¾	8	8¼
Madras, 3-gait.....			7½	7½	7¾	8¼	8	7¾	8	8¼
Madras, 4-gait.....			8	8	8¼	8¾	8½	8¼	8½	8¾
Double action, madras, 3-gait.....			8	8	8¼	8¾	8½	8¼	8½	8¾
Double action, madras, 4-gait.....			8½	8½	8¾	9¼	9	8¾	9	9¼
Double spool.....			9¾	9¾	10	10½	10¼	10	10¼	10½
Double spool fish net.....				11¼	11½	12	11¾	11½	11¾	12
Combination.....			9¾	9¾	10	10½	10¼	10	10¼	10½
Swiss and combination.....			12½	12½	12¾	13¼	13	12¾	13	13¼

TABLE 6.—REVISED LIST OF PRICES, 1900, FOR LACE GOODS MADE ON THE CURTAIN MACHINE—Continued

Type of product	Rate (in cents) per rack on machines of specified gauge and width							
	11-point, 324 inches	12-point				14-point		16-point, 240 inches
		240 inches	256 inches	300 inches	324 inches	240 inches	272 inches	
Ordinary, 3-gait.....	7½	7	7¼	7½	7¾	7½	7¾	8
Ordinary, 4-gait.....	8	7½	7¾	8	8¼	8	8¼	8½
Double action, 3-gait.....	8	7½	7¾	8	8¼	8	8¼	8½
Double action, 4-gait.....	8½	8	8¼	8½	8¾	8½	8¾	9
Madras, 3-gait.....	8½	8	8¼	8½	8¾	8½	8¾	9
Madras, 4-gait.....	9	8½	8¾	9	9¼	9	9¼	9½
Double action, madras, 3-gait.....	9	8½	8¾	9	9¼	9	9¼	9½
Double action, madras, 4-gait.....	9½	9	9¼	9½	9¾	9½	9¾	10
Double spool.....	10½	10¼	10½	10¾	11	10¾	11	11¼
Double spool fish net.....	12¼	11¾	12	12¼	12½	12¼	12½	12¾
Combination.....	10¾	10¼	10½	10¾	11	10¾	11	11¼
Swiss and combination.....	13½	13	13¼	13½	13¾	13½	13¾	14

Width: A one-fourth-cent rise and fall for every 3 quarters. All inches less than a quarter not to be paid for. A quarter and over to be paid for as 3 quarters.

Gauge: All gauges to rise or fall one-fourth cent for every gauge.

Ordinary double action with one cylinder one-half cent more than when made with two Jacquards.

All laces and edgings to be paid the same price as curtains.

Punched through patterns one-fourth cent less. Patterns not punched through up to and including 30 quality shall be paid one-half cent extra, and if punched through up to and including 30 quality the one-fourth cent shall not be deducted.

Nets of 30 quality and under, one-fourth cent less than curtains; over 30 quality, one-half cent less.

Six hours' time-work for entering or reentering beams.

Drop threads: All time lost putting up threads to be paid for.

Time-work to be paid at the rate of 25 cents per hour, or \$15 per week. Men on time-work to make the same hours as men on shifts.

Percentages to be added: 5 and 6 points, 12 per cent above card price; 7 and 8 points, 10 per cent above card price; all gauges above 8-point, 8 per cent above card price.

It will be seen that the price for a so-called "ordinary 3-gait curtain," which is the simplest goods to make, is 7½ cents per rack on the standard machine. A flat differential is added or deducted for each gauge above or below the standard and for each rise or fall of three quarters in width. A "quarter" means a quarter of a yard, which is 9 inches, and is the customary measure of width on the lace machine. With each class of goods above "ordinary" work there is an additional price for more complicated apparatus; for example, if extra bars are used, if extra gaits are traversed, if the Jacquard is run "double action" or twice as fast as the machine, if an extra Jacquard is used, or if the Jacquard operates on more than one or two bars. Thus the price of Swiss and combination, which is one of the most complicated fabrics to make, is 13½ cents per rack on the standard machine, almost twice the price for "ordinary" work. This is due to the fact that one Jacquard goes double speed operating on two bars, while the other Jacquard goes single speed operating on a third bar. In addition to extras for more complicated apparatus at work in the machine, the introduction of new styles of goods and improvements in the process have necessitated

additions to the scale for variations and combinations in equipment already provided, for time-work and other factors affecting earnings. These have been elaborated in later scales. At the present time there are extras for patterns not "punched through" that run up to a certain quality, for colored yarns, for silk and mercerized yarns, for yarns coarser than a certain count, and other contingencies in slight modifications of patterns or equipment. As an example of this, the time to be allowed for such work as threading and entering warps and beams is determined with respect to the standard machine—six hours' time being allowed for slewing (threading) the warp on machines up to the standard, and eight hours' time for machines above the standard.

Although the basic rates of pay established in the 1900 scale have never been changed, there have been changes in the wage level due to percentage increases or decreases in these rates at times of prosperity or depression in the trade. Five per cent increases in 1903 and again in 1907 were the last obtained before the long period of depression started in the industry. No general advances were then secured until the revival of prosperity in 1916. Between 1916 and 1918, increases amounting to 40 per cent went into effect, and an additional 30 per cent was gained between 1918 and 1921. With the depression of 1921, decreases amounting to 17½ per cent were made effective, but were restored in 1923, with the sudden revival of the trade due to style changes and the increased demand for window curtains as a result of the building boom of that year. For some classes of goods the increases between 1900 and 1924 amount to about 100 per cent advance; but for the majority of goods they amount to a 90 per cent advance.

An effort to equalize earnings between men doing the simplest work, "ordinary" work, and more complicated work on other classes of goods led to differential percentage increases in 1900 on the new scale: 5 and 6-inch machines received an increase of 12 per cent; 7 and 8-point machines received an increase of 10 per cent; and all gauges above 8-point received an increase of 8 per cent above the card price. Since that date, however, the percentage increases gained have always been applied as flat increases (with the exception of one differential of 5 per cent for ordinary work in 1918), and as a result, ordinary work has the reputation of being the "poorest paid" at the present time. To effect the same end, namely, the equalization of earnings between the weavers, flat additions or extras are required in the scale for extra bars and extra gaits, irrespective of the width or gauge of the machine. In this way a man on one of the old narrow looms receives the same extra pay for additional bars and gaits as a man on a finer, wider machine, although the latter may have as many as 2,000 more threads on each of the extra bars he uses for the pattern. Within the last few years differential increases have been asked for the men on the finer gauges in view of the additional work involved when they make complicated patterns, and their work is usually of that nature. However, at the same time, differential increases for ordinary work have also been asked with a view to equalizing earnings.³

³ One local branch of the union is experimenting with a "sharing-up system," by which all of the wages of the group are pooled and divided equally among the members.

The question arises in a scale of this kind as to who derives the benefits from improvements of the process. No accurate figures are available on costs of production, and it would have taken an elaborate study of costs, prices, and earnings to answer this question satisfactorily, but certain information is at hand which may be suggestive if not conclusive. It is reported that the costs of producing lace-curtain products tend to divide, on the average, in thirds: One-third for labor, one-third for raw materials, and one-third for overhead expense. Two things may be said to be generally true of the industry. Few revolutionary improvements in process have been made, and basic piece rates once set are never cut. The benefits of improvements in some cases have gone in greater measure to the worker and in others to the employer. Thus square-ground curtains, sometimes called filet, were very difficult to make when the price was originally set, and although improvements have made the process much easier the same high rate of pay remains in force. On the other hand, the effort to equalize earnings for men on small looms, which took the form of uniform extras for bars on wide and narrow machines, resulted in a lower proportionate labor cost on products of the wide looms and led to the rapid displacement of narrow by wide looms. The benefit in this instance obviously goes to the employer.

The price list developed in this way has never been challenged by the workers as a basis of payment. At the price conference in December, 1921, one local proposed a change to a time-work basis, but the proposal was never seriously considered by either side in the negotiations. In fact, the general policy of the union has been to get all possible work on a piecework basis. One convention of the union went on record opposing a bonus system of payment for racks or time work. These two instances are the only recorded statements of attitudes to general methods of wage payment. The textile trade-unions are among the few labor organizations favoring piecework. It is preferred for two reasons: First, a standard rate of wages is easily maintained in view of the standardization of textile machinery; second, the speed of the machines and the amount or kind of equipment is outside the worker's control, and speeding up by the employer would necessitate constant requests for higher wages if time-work were in force. Payment on a standardized scale according to the equipment of the machine automatically gives the worker the benefit of the increased speed or increased equipment, and uniformity can be more easily "maintained between man and man, and between mill and mill."⁴

WORK OF THE PRICE CONFERENCES

When the uniform price list superseded local wage agreements in 1900, it was some years before the machinery for collective bargaining was put into working order. The first formal meeting of representatives of the employers' association with representatives of the union took place in 1907, when the nine-hour day and a small increase in time-work rates and rack price were obtained. Between 1900 and 1907, agreements were made by correspondence between the two sides and by local adjustments. In 1910 and again in 1912, price conferences were held, but no increases were granted. Although

⁴ Webb, Sidney and Beatrice: *Industrial Democracy*. New York, Longmans, Green & Co., 1919, p. 288.

the manufacturers recognized the demands as "reasonable," the unemployment and bad trade conditions prevented any increases. The first general wage increase went into effect following the conference in 1916. From then on, with improved trade conditions, conferences were held more frequently and wage increases and other concessions were obtained. Since 1922, price conferences have been held semi-annually; and recent agreements have been effective for only six months. The dates for holding the conferences have been set with a view to establishing wage levels before the prices for goods for the new season are established. The fall conference is usually held in October or November and the spring conference in February or March.

In the early price conferences the union had delegates from every branch, elected as convention delegates were elected, that is, 1 for every 50 members or fraction thereof. Preliminary conferences were held by the workers at which they decided what issues to press, what to drop for the time being, and also which of the delegates should present the various aspects of their case. The method was cumbersome, because considerable time was spent in arriving at the best procedure for the price conference, and in long speeches from all or most of the delegates at the conference itself. Busy employers occasionally felt that precious time was being wasted in unnecessary preliminaries. The method was an expensive one for the union as well. Gradually the number of delegates was cut, until at the present time the curtain section wage conferences are handled, on the workers' side, by a wage committee of five members. These are the section executive committee members and two delegates elected at large from the entire membership. These committees have always had the "power to settle," but very often the proposals of the manufacturers would not be sufficient to meet their instructions. In such cases the proposals were put before the membership in ballot form to insure satisfaction with the settlement.

As a more efficient type of committee was elected to represent the curtain weavers, gradually one or two spokesmen came to discuss the interests of each side. On the employers' side, certain points were brought up for brief mention or prolonged discussion at recurring conferences. These were chiefly general trade conditions, the certainty or uncertainty of the tariff schedules, and the competition of foreign goods and of nonunion plants. On the workers' side, the rising cost of living, general trade prosperity, wage increases in other textile industries, and rising prices and wage increases in the protected industries have recently taken much time in the presentation of the workers' case. The major issues coming up for discussion in these joint conferences have been wages, hours, a differential wage for the double shift, unemployment insurance, and old-age pensions. The uncertainty of the tariff has been used by the employers to forestall increases in wages, and the passage of a favorable tariff has been used by the workers as an argument in favor of an increase in wages. The manufacturers and workers in the industry take it as a matter of course that wage increases have been passed on to the consumer in the form of increased prices in recent years. The tenor of the employers' remarks often is that unexpected increases in wages fall heavily upon orders for future delivery, and that all increases must be timed with a view to the selling season.

MAJOR ISSUES IN NATIONAL COLLECTIVE BARGAINING

The conference discussions on hours deal chiefly with the attempt of the workers to obtain a shorter working-day, the attempts of the employers to secure the three-shift system or an allowance of overtime, and questions arising in connection with the double-shift system.

The union obtained the nine-hour day for weavers in 1907. The agreement at that time provided for a 50-hour week for single-shift men and 97 hours per week for two men on a double shift. The results of this reduction in hours were apparently satisfactory to both sides, since the employers conceded that more production was obtained under the shorter hours. This was due, however, to the fact that under the old system time had been allowed for breakfast and tea, which was now omitted, and that the former very early hours of opening the mills resulted in considerable tardiness, which was eliminated to a great extent under the new plan.

At the conference of January, 1917, the curtain weavers asked for two 8-hour shifts, but the item was tabled in an endeavor to get an increase in wages. The arguments presented by the workers for the 8-hour day included a plea for steady employment at a reduced number of hours per day on the ground that the workers had not averaged six hours a day for years prior to 1917. In 1919 the 44-hour week was proposed, but action was postponed at a conference in July, and when the question was brought up again in November the manufacturers offered an increase in wages conditional upon hours remaining as they were. At the earlier conference in July some hope had been extended to the workers that the 44-hour week might be adopted, but the manufacturers would not recede from their November proposition, and so the one manufacturer who had promised the 44-hour week was released from his promise. In 1920 a ballot on the 44-hour week was issued to the curtain section, the results of which showed that 337 members were in favor of it and 124 against it. The support for the proposition came strongly from the larger locals. However, the request was again refused by the manufacturers both at this time and in the 1921 and 1922 conferences. In 1923 the workers omitted it from their list of requests, but it was scheduled to come up again in 1924.

Requests for overtime work on those machines for which there were large orders ahead have been frequently made by manufacturers, especially in 1921 and 1922, but this has met no encouragement from the union; nor has the request of the manufacturers for three 8-hour shifts, although in one instance the latter was allowed as an emergency measure.⁵

The proposal to abolish the double-shift system was tabled in the 1910 and 1912 conventions when the question came up for the first time. The proposal had the support of the larger locals, like the Philadelphia local, where large plants employed a number of men on the single rather than on the double shift basis. In the smaller locals, however, the proposal was strongly opposed because the small shops usually maintained a working force sufficient to "double-hand" the

⁵ A recent agreement between the Scottish Lace Manufacturers' Association and the British Lace Operatives' Federation permits overtime work to the extent of 10 hours weekly for three weeks, beginning after the completion of 48 hours by single-shift men and 45½ hours by double-shift men. (Manchester Textile Recorder, May 15, 1922, pp. 67, 68.)

machines, and a change of this policy would have necessitated the dismissal of half the men. It was claimed in the 1919 conference that the double-shift men averaged \$5 less a week than the single-shift men, and for that reason additional increases in wages were asked for the former, in the 1917, 1919, 1920, 1922, and 1923 conferences. In 1923, the union asked for a five per cent increase for the men working shifts, which was to form a permanent differential. The main reason for the difference in earnings between men on one shift and men working two shifts is that other parts of the mill work only a single shift, and the double-shift weavers are often kept waiting for auxiliary work to be finished before they can continue their work. Another argument advanced by the workers in favor of such a differential has been that workers in other textile trades are paid time and a half for working at night. To this the manufacturers answer that the lace industry has always been organized on a double-shift plan, and that the original piecework price lists in England were set at a level high enough to take care of this difference.

The request for an old-age pension plan, supported by joint contributions from the employer and the employees and jointly controlled, was made in the 1920 conference. A committee was appointed by the manufacturers to take up the matter with representatives of the union, but after a report at the following conference, the matter was allowed to drop. In the conference of November, 1922, the curtain section of the union proposed the establishment of an unemployment insurance plan which would guarantee \$15 a week in slack times for a period not exceeding 12 weeks (\$15 being a minimum wage in effect in three of the local branches). The fund was to be accumulated through contributions by the employer in the amount of 1 per cent of the pay roll and by the workers in the amount of 1 per cent of their earnings. A committee of the workers had made an extensive study of their records of dues payments, which are set on a graduated scale according to earnings and show the weeks in which the earnings of the men have fallen below \$15. It was estimated that 2 per cent of the pay roll would be sufficient to establish the fund. A committee of the manufacturers agreed to accept the plan provided the following conditions were met: First, that time clocks be introduced in all of the mills; second, that individual records of production be kept by the weavers, instead of the present method of crediting production to the machine and not to the men; and third, that a chance be given the manufacturers to take a vote in individual shops on any questions that might arise. The last condition was impossible from the union's point of view as undermining its power. Unemployment insurance as a national issue was then dropped; but it has since been taken up locally, and there are three branches which have succeeded in obtaining it (in one case the scheme covers the entire mill, auxiliary workers as well as weavers), and in addition one shop in a larger branch has undertaken the plan, but has modified the contribution provisions in order to avoid bookkeeping.

WORK OF JOINT TECHNICAL COMMITTEE

Many unions have found the most successful arrangement in collective bargaining differentiates between the agency for making a new

agreement and that for interpreting an old one. This is especially true in piecework industries where interpretation of the wage scale and settlement of disputes in the period between agreements is highly important. In the lace-curtain industry this differentiation between legislative and judicial functions has been slow to develop. The early price conferences were filled with technical questions, most of which were left unsettled for long periods of time, since both sides had to refer them to technical advisers. After 1912 committees were usually appointed to deal with these questions if left unsettled by the main price conference. In 1921 a permanent joint technical committee was established, with an equal number of representatives from each side, to take up all unsettled questions and pass upon all temporary prices set on new goods under the price list. If, for example, the shop committee and the management are unable to decide upon a temporary price for goods not quoted in the price list, the technical committee may be called in to fix such a price, "to go for 2,500 racks or not more than six months." The price is later approved in joint conference, and changes made are retroactive. The joint technical committee's work has resulted in the elaboration of a scale for coarse yarns, which have been used extensively in recent months and for which payment had never been standardized. It has been decided that what constitutes "bad" yarn, for which extra payment must also be made, is to be left for determination by the individual shop committees and managements. Other decisions of the committee concern the interpretation of the price list with different combinations of equipment and yarns than those specifically covered. One branch refused to accept an award of the joint technical committee because its consent had not been secured to the decision and its local autonomy was thereby invaded. This opposition endangered for a short time the existence and work of the joint technical committee which has brought many old issues to a successful conclusion and is looked upon as a highly satisfactory experiment. Fortunately, the opposition failed to break up the committee which is responsible for the uniform interpretation of the collective agreement throughout the trade.

The price conference reports present the usual propositions and counterpropositions, tentative advances and retreats, offers and refusals, bargaining and idealism to be found in any similar records. Early suspicions and veiled threats, grudges and "old scores to settle," have given way in recent years to a businesslike procedure for settling a business proposition. This has been materially aided by a decrease in the number of representatives for each side, a relative permanence in the personnel of the two groups, and the omission of technical questions from the agenda. Attempts of the workers to raise their standard of living have met with success as trade prosperity has returned to the industry; but a shorter working-day, the abolition of the double-shift system, and a differential wage for men working shifts have met obstacles difficult to overcome. One can not fail to give credit to the leadership on both sides which is responsible for the success of the collective bargaining arrangement and the amicable relations existing between the two parties to the agreement.

Chapter VI.—JOINT CONTROL¹

In the lace and lace-curtain industries a gradual evolution in the method of handling grievances and the crystallization of settlements of disputed cases into an elaborate code of shop regulations have brought the trades to a condition of relative stability. Only a minimum of time is now lost through stoppages and strikes, and a general feeling of satisfaction exists on the part of both employers and workers as to the result of their joint efforts and generally amicable relations. The machinery probably works more slowly, less uniformly, and with a narrower vision of the long-run needs of the industry than does the collective bargaining arrangement in which an impartial chairman interprets the trade agreement and adjudicates all disputes arising under it. However, the immediate results are essentially the same. No arbitrator can make awards which entirely disregard the relative bargaining strength of the two parties or the probable outcome if his position had not been created. Where no arbitrator exists the balance of power and general trade conditions, together with the merits of the particular case and the way in which it has been handled, make for settlements which are compromises, first for one side and then for the other. Naturally, in the lace and lace-curtain industries, both sides have ambitions which are not fully realized and programs which may never materialize; but they have achieved a fair measure of success in the democratic control of shop problems, which comes only through collective bargaining over long periods of time, accompanied by a spirit of good sportsmanship and cooperation.

A shop committee composed of a shop steward or "responsible member" and two committeemen is the shop unit for handling all grievance cases. Disputes not settled by the shop committee and the foreman are referred to the branch trade committee and to a higher authority in the management. If still unsettled, they go to the executive board of the union and to the highest authorities in the management of the firm. It has been the custom of the union to pay a worker strike benefits for all time lost in the adjudication of any dispute in which he received the support of the union committees. More cases were appealed in the earlier years of the union's history than in later years, when precedents had become established and recurring local and national agreements incorporated settlements of moot points. At the present time, most questions are settled by the shop committee and the management.

¹ Cases cited in this chapter are based on Amalgamated Lace Operatives' Society. Minutes of executive board for years 1904 to 1917.

MAJOR ISSUES IN LOCAL DISPUTES

An analysis of the cases referred to the executive board between 1901 and 1919 shows that these involve five main issues:

- (1) Cases of discharge involving problems of shop discipline.
- (2) Cases of discharge for inefficiency, in which the union asked for reinstatement, but allowed the employer to penalize the worker by fines or by placement in a different shop or on a different machine.
- (3) Cases of discharge in which the union claimed discrimination and forced reinstatement.
- (4) Cases of dockage or fines for spoiled or imperfect work.
- (5) Complaints of delays in work due to inefficient management methods and charges of favoritism.

CASES OF DISCHARGE

The first recorded statement of an issue, which has since come up repeatedly in the history of every branch and which was the cause of several prolonged strikes in earlier years, was "A man was bounced, and all the men threatened to go out unless he was reinstated."² With the passage of time the strikes called for this reason became less frequent, and there evolved a body of precedents in discharge cases. At the present time most local agreements, especially in lace-curtain shops, stipulate that an employer may not discharge a weaver, but may prefer charges and suspend him, pending investigation by the shop committee. If the committee considers the worker's cause to be a just one, it requests his reinstatement. If this is refused, higher union tribunals are called upon to investigate the case and negotiate a settlement.

Certain misconduct—fighting, drunkenness, dishonesty, insubordination, and the use of abusive language—has usually been conceded as just cause for discharge.

In 1911, a man was discharged from one mill on the charge of arrogance and the use of abusive language. The shop committee investigated and decided that the man had no case, but he appealed to the branch general meeting and was able to secure enough sympathy from the members to have them instruct the trade committee to ask for his reinstatement. The trade committee, however, decided that sufficient cause for discharge had been given, and when the man appealed to the executive board, it likewise dismissed his appeal.

The "overofficiousness of the responsible member" caused one Levers shop steward to be discharged, and the employer refused to reinstate him unless he applied to the foreman as a new employee. This he refused to do. The executive board was called in on the dispute, for the shop had been thrown into great confusion by the discharge of the steward and the workers feared the complete breakdown of their newly acquired recognition by the employer. The board accepted the employer's condition for reinstatement, and withdrew the man's strike pay, thus forcing him back to work.

A firm's claim of insubordination has been challenged upon occasion. Notice had been posted in one mill that a weaver would be

² Amalgamated Lace Operatives' Society. Minutes of Patchogue local, 1892.

discharged if discovered away from his machine while it was in motion. Shortly after this a weaver who had left his machine in motion while lodging a complaint with the shop committee was discharged. All members working on the same class of goods were withdrawn in an effort to force his reinstatement, but this was unsuccessful. The union had been but recently organized in this district, and was not strong enough to force the issue, so that the case had to be dropped. On the other hand, the same issue was successfully fought in another locality where the union's position was strong. In this case the man had gone to get a drink from the sink at the end of his machine and had stopped to talk to another worker on his way back. He was discharged for "being out of his alley." To force his reinstatement, all of the curtain weavers in his own and another shop were called out. In most cases of this sort where a deadlock had been reached in the negotiations with the management the custom has been to threaten a walkout, and if this did not succeed actually to withdraw the men, first those working on the same class of goods, next, those on the same gauge of machine (in cases where more than one class of goods is being produced), and finally, all of the weavers in the shop or shops controlled by the management in that locality.

Discharge for inefficiency has been in a somewhat different category from the causes of discharge just discussed. When the executive board has been called in to adjust a dispute involving discharge for inefficiency, an effort has been made to have the man fined for poor work and reinstated fully or temporarily on trial unless habitual negligence made the management insist on discharge. The management's power to insist on discharge has been tempered by general trade conditions and the strength of the union at the time. In one dispute in 1908 two men were discharged for breaking a machine, "through carelessness," as the foreman claimed. As a result of negotiations with the management the board succeeded in having the men reinstated and fined for imperfect work. In another case a man was discharged when an accident happened to his machine while he was looking for a pattern. In this instance the management claimed that he was habitually negligent, but after negotiation he was reinstated on the same class of goods but not on the same machine. Another interesting case involved the dismissal of a man who had been called to the mending room to look over work having a number of broken bobbin threads. He became involved in a fight with the foreman, although there was some question as to his responsibility for starting the altercation. After apologizing to the foreman, the worker was given work in another shop.

At times the question of responsibility for inefficiency or poor work has not been clear and the union has endeavored to protect the worker's rights in the matter. In 1913 the executive board received the appeal of a Levers minor in his third year who had been discharged for making two pieces of flouncing 2 inches too short. The boy had gone to the draftsman with the "dead-stop sheet", according to his story, and had inquired about the number of repeats necessary to make the required length. He had been told that one repeat was sufficient. During the process of the work, however, the foreman, without notifying the boy, altered the sheet to read "2 repeats necessary". When the boy was discharged the foreman refused to rein-

state him, and after a shop meeting the men on the same gauge of machine struck in sympathy. The management offered to declare the boy out of his apprenticeship and reinstate him, but the weavers thought they had a good case and wanted to fight it out. After about six weeks of negotiation and conferences, the boy was reinstated on a different machine and the other members went back to work. In another case a man was discharged for low output which he claimed was due to poor repair work on the machine. The shop committee supported the man in this, and as the result of a deputation from the board, the management agreed to take back the man on another machine for two weeks to test his ability.

Occasionally a man has been discharged on the grounds of inefficiency who the union officials thought was being victimized for activity on union committees. In such cases the issue was fought through to a finish, although it often involved considerable lost time on the part of a whole mill.

In most industries the right of hiring and questions connected with it are considered as important as problems of the right of discharge. This has not been true in the lace and lace-curtain industries because the early attainment of the closed shop in most of the lace-curtain plants and in a few of the lace mills closed the question. After the closed shop was attained in a mill an applicant for work as a weaver had to "get right with the union" before being allowed to take a machine. In the case of foreign workers—and most of them were foreign—this often entailed considerable delay in waiting for transfer cards from European unions, much to employers' annoyance.

CASES OF FINES FOR IMPERFECT WORK

Next in importance to cases of discharge have been disputes over fines for imperfect work and complaints of poor machine equipment. In recent years these questions have been more fully covered in shop rules and local agreements which are, in effect, the codification of certain precedents of long standing in the trade and new developments established in the negotiation of disputes. The "custom in the trade," upon which present shop rules and decisions in cases are based, may be traced back to the "stoppage clause" of the 1884 price card in Nottingham which was as follows:

1. That no stoppages shall be made for places caused by the fault of the machine, Jacquards, cards or any portion of the machinery.
2. That any manufacturer requiring his workmen to look over his cards before working them, the time shall be reckoned as alterations, and subject to the law thereon.
3. That there shall be no stoppages for waste cotton in the curtain trade, unless it can be proved that the cotton stripped off the bobbins was sufficient to make a curtain.
4. That stoppages shall be made for workmen's neglect causing extra mending, places across, spoiled work, and not carrying out written instructions in a workmanlike manner as to quality, etc.
5. That stoppages shall not be made without the knowledge and consent of the shop committee in each firm.*

This clause became the custom in the trade in the United States until local agreements made changes or elaborated its principles.

* Curtain price list of 1897, Nottingham, p. 24.

As a result of the long period of interpretation of trade practices in Europe, the union here was able to settle most cases in the shop, and few had to be appealed to the executive board. The cases which were appealed were in the nature of test cases involving new principles and new regulations, a charge on the part of the union of "excessive" dockage, or disputes arising as to the determination of responsibility for errors in work.

In one such case a weaver was "stopped 33 racks" meaning that payment was stopped on 33 racks of lace curtains, for alleged long lengths.⁴ The weaver claimed that he had made the right number of motions, but that an irregular "porcupine" roller caused the wrong lengths. There had been some mistake on his part in not working "to the tape" or yard measure, and the case was finally adjusted by compromise. Allowing thick threads to run through several lengths, which was the result either of a wrong count of yarn on one of the spools or of the weaver's catching two threads instead of one in threading the machine, was also cause for dockage, especially if the threads went through as many as 32 lengths, as in one case coming to the executive board. The firm's decision on one case of "thick threads" had to be left unchallenged because of the "extreme depression in the trade" at the time, although the union considered the dockage to be "excessive." In another dispute, a man had made four lengths of a wrong pattern and was told to buy it or quit. The man refused to buy it, claiming that this was contrary to shop rules, and a deputation from the board supported the worker asking that he lose the racks but not be forced to buy the goods. Later, a pattern which had been dropped from the selling list of a mill was produced by a weaver through a mistake. The goods were sold at a reduced price, but the firm refused to pay the man's wages for them. The Society claimed that it had been a long established custom in the trade for the weaver to be paid if the goods were sold, and threatened to sue the firm for payment. In 1913, a dispute arose over payment for spoiled work caused by the dropping of a card wire. New shop rules had covered such a case, but the foreman refused to pay wages for the work. The shop members agreed to abide by the new rules, and forced payment by calling out all men on the same class of goods. In general, if the management was responsible for spoiled work because of insufficient instructions on the part of the foreman or by reason of poor machine equipment, the union forced wage payment. If the worker was clearly to blame, fines or dockages were allowed, and if both management and worker were to blame the issue was compromised.

A question that has constantly presented difficulties to the union officials has been that of deciding at what point the weavers' responsibility for damaged goods ends. The union has always maintained that the weavers would accept no responsibility for errors in work not detected before the goods left the mending room for bleaching and dressing. In other words, their responsibility lasted only while the goods were "in the brown." One case came up for settlement in which the mistake had not been detected until six weeks after the goods had left the machine.

⁴ A "length" is whatever length the order designates for the curtain or lace, say 2½ or 5 yards, as the case may be. The weaver has to calculate the yardage from the rackage which an indicator on the machine marks, and the "quality" which is the number of motions to the inch of goods.

COMPLAINTS OF DELAY

The workers, especially in some of the smaller mills, have lodged with the executive board many complaints regarding the equipment provided by the employers and inefficient methods of management which adversely affected the workers' earnings. The most frequent complaints have arisen over delays while threading and winding was being done. One branch had to request the executive board to take up with its management the matter of delays due to waiting for warps, threading, brass-bobbin winding, and the use of badly damaged pattern cards. Waiting for brass-bobbin winding continues to be a frequent source of complaint even at present. Another branch appealed to the management "to appoint a permanent foreman on the floor, who would not operate machines but look after conditions in the shop, especially furnishing the machines with sufficient bobbins and carriages to eliminate the excessive waiting that prevailed." Lack of cotton yarn has often necessitated the stopping of some machines, and in one instance brought about the shutdown of the entire mill. The following verbatim account from the executive board minutes (August 28, 1911) of conditions in one small mill needs no comment:

The deputation to _____ reported that conditions in the lace mill were such that our members were kept in a turmoil, not knowing from whom to take orders; as at times the manager, then the foreman, and at times the treasurer of the company would give orders. It is obvious that the managers of this firm are at variance with each other, thereby causing considerable discontent among our members.

It will be remembered that the lace and lace-curtain machines were imported from European manufacturers, and since European methods of production make of each machine an individual creation, there are no interchangeable parts, and repair parts usually have to be made to order. As a consequence breakage of machines has often resulted in considerable delay in equipping them for production again. This has accounted for some complaints coming to the executive board. One of the greatest disadvantages of an unstandardized machine equipment lies in the fact that it gives opportunity for favoritism. It has been estimated by several union members that the difference between a good and bad machine—whether the latter be an old model or merely badly repaired—may mean a difference of from \$5 to \$20 in the worker's weekly wage. Opportunity for favoritism also arises in the method of giving out work in the shop. The making of samples always involves considerable changing of the equipment of the machine and the lost time cuts the worker's earnings below those possible on straight piecework. On several occasions the workers have complained that the order clerk discriminated against them by giving them too much sample work. In one case an altercation between the order clerk and a weaver resulted in a fight, and both were discharged. In another instance, where the order clerk was also a coal dealer, the weavers claimed that he discriminated against those who did not buy coal from him by giving them harder patterns to make, or goods on which their earnings would not be so high as those secured by the weavers who did buy coal from him. The executive board could secure no evidence on this complaint, however, and the case was dropped. These two cases are

interesting because of the light they shed on production methods and distribution of work in the shops, which place a premium on favoritism. Even at the present time, although many improvements have been effected in production methods in the more progressive plants, the distribution of work is unstandardized and unsystematic. This is particularly true of factories which manufacture to order and not for stock. Orders are given out to the machines when they come in from the salesmen and jobbers, and often entail needless changes of equipment and pattern cards from day to day, or week to week, thereby lessening production and the workers' earnings.

ELABORATION OF SHOP RULES

Lack of uniformity in shop regulations from locality to locality or from shop to shop has given rise at several times to a movement for national agreement on shop rules; but this has been voted down at conventions when proposed, since many locals or shops have enjoyed special privileges they were loath to sacrifice.⁴ Variations in shop rules in the three important lace-curtain plants in Philadelphia led to a general agreement for that locality in 1913, which has become a standard for the entire curtain industry. In this case uniformity was practically forced upon the union by the discharge of two men from one mill in 1912 for making wrong quality. The condition of their reinstatement was a promise by the executive board to negotiate in the near future on the matter of uniform shop regulations, and the present rules are the result of that negotiation. Somewhat later, the Philadelphia shops agreed to have no stoppages of work until the dispute had been referred to the branch trade committee and to someone higher than a foreman in the management. If no settlement were secured in three days, a stoppage of machines might follow. The List of Shop Rules to Govern the Curtain Shops in Philadelphia contains regulations which may be grouped under the following headings:

(1) Payment for work of the weaver (not otherwise covered in the price list), such as cleaning or starting the machine, changing the action of the Jacquard with differently equipped machines, and turning on the machine for the fixer or machinist.

(2) Necessary equipment to be given the worker, including regulations concerning the number of repeat cards that must be supplied, aid to be given the worker in using bad or broken cards, the use of the rack indicator, and aid for single-shift men in placing warps and beams.

(3) Distribution of work, including the regulation that each lace maker waiting for orders must report each day except Saturday between 9 and 10 only, and that when a lace maker has no orders he must report that fact to the foreman and responsible member. Further, when a shortage of yarn appears, the number of machines working that grade of yarn is to be reduced and the men placed on other machines wherever practicable.

(4) Payment for spoiled and imperfect work. Payment on the racks is stopped for the making of wrong patterns (if the goods

⁴ Amalgamated Lace Operatives' Society. Convention proceedings, 1914, p. 127.

remain unsold), wrong quality, wrong gait, and short lengths, "except in cases of unusual negligence, when the firm shall have the right to determine what disposition shall be made." Lace makers are required to measure the first length of each order to avoid making wrong quality. No stoppages of payment are allowed for "thick threads," "places across," or "spoiled work" unless the result of unusual negligence. In the case of "run-overs," the weaver is to be fined 25 cents, but the racks are to be paid for. Although not specifically stated in the rules, all mending which is the result of long stitches (broken threads extending over a yard) or carelessness on the part of the weaver must be paid for by him at the hourly rates of the menders. Finally, a list of all dockages must be furnished the shop committee at the end of each week.

(5) Miscellaneous items covering the requirement of sanitary drinking water in the mills, holiday hours, and pay-slip statements.

SHOP PRACTICES

The double-shift system is in use in all of the mills, and the production and dockage are charged to the machine, and not to the individual. In this way, it is sometimes difficult for an employer to fix the responsibility for careless work and inefficiency. The regulation that the shop committee is to receive each week a list of all dockages is designed to give an opportunity to the committee to warn members who appear to be getting careless. It is reported that the warnings of the shop committee are usually more carefully heeded than those of the employer. It should be added with regard to the distribution of work that lay-offs are not permitted, and that in slack periods the work is divided among the weavers as evenly as possible, even if all are reduced to working two hours a day. This is a common trade-union practice, but is open to several objections. In the first place, it is exceedingly difficult for an employer to get rid of an inefficient employee in a lace or lace-curtain mill, as the latter can not be laid off in dull seasons, and it is difficult to prove habitual negligence if the shop committee keeps warning him or if his partner on the other shift does good enough work so that the total production of the machine is average. Further the demoralizing effects of working two or three hours a day for weeks or months if the depression in the trade lasts long enough are difficult to overcome.

The double-shift system for lace makers, which is the result of the high cost of the machines, has existed in the trade since the time of the invention of the bobbin-net machine. Although the total number of hours worked per day and week is controlled nationally by the union, each shop may arrange the shifts to suit local conditions. In the branches outside Philadelphia the hours are usually from 7 a. m. to 4 p. m. and 4 p. m. to 1 a. m., the men alternating the shifts every week or two weeks. In Philadelphia two shops work from 5 a. m. to 2 p. m. and from 2 p. m. to 11 p. m.; and one shop works the English split-shift system, sometimes called the "swing shift." In the latter instance the first shift comes on at 5 a. m. and works until 9 a. m.; the second shift works from 9 a. m. until 1 p. m.; the first shift then comes back and works from 1 until 6 p. m.; and the second shift then comes back and works from 6 until 11 p. m. Some

of the older workers prefer the swing shift, although it is obviously inconvenient in several respects. The argument advanced in favor of it has always been that the weaver's work was too strenuous to be done at a continuous stretch, particularly in hot weather when the steam heat has to be turned on in the mills to overcome the humidity.⁵ Many workers have opposed the swing-shift system, and it is now practically extinct. The opposition to the double-shift system in general comes from the larger rather than the smaller mills, for reasons stated before; but it has made little headway up to the present time.

It is worth noting that, as a result of the double-shift system, the workers have little supervision, since the management and other parts of the mill work during the day only. The weavers are therefore independent and somewhat jealous of any infringement on their independence. Like the miners who work with little supervision, they are very casual about time keeping. One firm experienced difficulties in trying to fine the weavers for tardiness. Another firm at least, and probably other firms, asked the executive board's permission before putting in a time-clock system. In fact, the manufacturers requested the curtain section's approval of time-clock systems, among other production reforms, as a condition of initiating an unemployment insurance scheme in 1923.

In only one branch of the union has the general security of the worker led to emphasis on seniority rights in promotions. In this branch seniority determines the gauge of machine and class of goods to be worked by the weavers, and the promotion of auxiliary workers to be apprentice weavers. In the words of the auxiliary constitution, "Seniority and merit (merit to be determined by the union, at a summoned meeting if necessary) shall be recognized and employed in making promotions; or when laying off members of this association, when there is little or no work in slack times, where and when the pro rata basis is unwarranted and so determined by this union."⁶ This position on promotions is exceptional in the union, and is not viewed with favor by the majority of the members.

Many union members have been promoted to positions of prominence in various managements. Some of these held important positions on union committees, and thus gained the respect and confidence of the members. It is rather unusual in any industry to find such a large proportion of foremen, superintendents, and even managers, members of the union. They are not active members, but are what is known as "levy members," eligible to the death benefits of the organization. This means that they are thoroughly familiar with the traditional union policy and the attitude of the rank and file, and thus avoid misunderstandings with regard to the union stand on technical and other questions. Although it may have some disadvantages from the point of view of progress and experimentation, promotion from within undoubtedly makes for more amicable joint relations. The problem of what the levy members and foremen should be permitted to do in the case of strikes has been the source of difficulties, particularly in the Levers trade. It was finally decided that foremen could not do straight weaving but could run off samples

⁵ Amalgamated Lace Operatives' Society. Price conference report, January, 1917, p. 26.

⁶ Constitution of Branch A, No. 2, Lace Auxiliary Workers, p. 42.

and turn machines enough to keep them in condition, and still retain their levy membership.

In the days before permanent machinery and a more systematic procedure had been evolved for the settlement of questions arising over the classification of goods and new piecework prices, such problems arose frequently. This was especially true of the Levers trade, where difficulties were encountered in the establishment of a universal price list. In the early years in the curtain trade, if the shop committee and the foreman were unable to settle the price for new goods, the committee very often refused to allow any one to do the work, and occasionally called out all men working on the same gauge of machine in an effort to force a settlement. Gradually the policy changed to one of allowing men to do the new work, but requiring back pay on all racks made, after the price was finally agreed upon by both sides. Still later, the piecework price list was elaborated, and precedents established in the classification of goods were extended to all similar cases. Finally, in 1921, a permanent price committee was established to aid the executive committee in all technical questions, the work of which has been discussed in connection with the development of the curtain price list.

Since the majority of cases coming before the union's executive board for adjudication have been of a technical nature—such as questions of interpretation of the price list, prices for new work, dockage for imperfect work, equipment of machines, interpretation of shop rules and trade practices, and more rarely questions of discipline and discharge—they would in the nature of the case be difficult for an arbitrator to solve. The lace workers have refused to arbitrate their disputes on the occasions when such procedure has been proposed, although Government mediation was accepted in a few instances. The organized textile trades have been slow to adopt the impartial chairmanship type of collective bargaining machinery which is found in certain other trades, such as clothing and printing. The one textile experiment of this kind in the silk ribbon weaving trade in New York was short-lived.

Chapter VII.—CONCLUSION

It has been the intent of this study to describe the labor relations of an old textile industry, with an interpretation in terms of the historical and economic background of the industry. The machine-made lace industry in Europe has had the benefit of a century of experience and the skill and traditions of generations of lace workers. In this country it has been but recently transplanted under tariff protection and is not old enough to have established many traditions. The major differences between the European and American industries lie in the size of the factory unit and the assumption of the risks of the industry. Large-scale production has developed in the United States, where manufacturers carry on all of the processes of the industry, and there are no producers who rent machines and floor space, taking orders from warehousemen, as in England and France. Although small, the American lace industries are of unusual interest because of their importance in international trade and American tariff problems and because of the outstanding features of their labor relations.

The most important of these factors in labor relations may be grouped under the following points:

(1) Predominance of the skilled workers in the industry, and the growth of a strong craft union.

(2) Control of the labor supply of weavers.

(3) Attempts to gain economic security through high wages, shorter hours, and unemployment insurance.

(4) Protection of the weavers' "rights" in the shop through local collective bargaining.

The general outline of the interpretation of this labor situation has been suggested in earlier chapters. The clue is to be found in the economic conditions of the industries. The program of the union centers on security of employment in trades where the risks of insecurity of employment are at a maximum. The causal factors in this case are irregularity of employment in a fashion textile trade, and the high degree of specialized skill required of the workers, which results in their relative immobility. As a result, the union attempts first to protect the present occupants of jobs against newcomers, whether they be untrained apprentices or trained men coming from the European lace centers; second to protect the worker against arbitrary discharge or unwarranted fines for spoiled work; and finally, to secure higher wages and shorter hours, all with the distinct purpose of offsetting the risks carried by the worker as well as of improving the workers' standard of living.

In view of these circumstances the growth of a strong craft union would be expected, but it is interesting to note that this did not occur without a struggle among the lace workers. The general history of the union, as portrayed in manuscript records going back over 30

years, reflects the history of all organized labor. The struggle for control between the large and the small branches, between local and national officials, and the slow evolution of effective agencies for handling various union activities and joint relations with employers are an important part of the history of all labor organizations. A trade-union is essentially opportunistic in its policies and program. Apparent discrepancies between philosophy and methods, or inconsistencies in policy, are mainly due to the swinging of the balance of power between employers and workers and between groups of workers with changing economic conditions. The bitter struggle over craft versus industrial unionism and the resulting factions in the lace operatives' organization illumine, in a striking way, the cross currents of aims and programs, methods and policies, philosophy and idealism, of that highly complex organism known as the labor movement.

The control of entrance to the skilled crafts through high initiation fees, strict apprenticeship regulations, and watching of the channels of importation strengthened the position of the skilled crafts in bargaining with their employers. These policies, as well as good discipline within the ranks of the organization and other features of the union's collective bargaining program, were furthered by the attainment of the closed shop for a majority of the organized workers.

The national collective-bargaining program centers on matters of wages and hours. An unusual feature is presented in the development of the piecework price list. The skilled trades in lace making have never been subdivided and conditions of manufacture in these operations have remained unchanged for long periods of time. This does not mean that there have been no technical improvements in the industry. On the contrary, the variety of products is infinitely greater than formerly and their quality has vastly improved; but this is due primarily to improvements in the finishing and preparatory processes, development of designs, and new adaptations of the machine process which have not revolutionized the machine. Hence the piecework wage scales effected through early bargaining arrangements between the manufacturers and workers of England have been the basis of revised scales in this country. The type of scale developed has been one in which an average size and gauge of machine is defined as the standard, with fixed differentials for all additional equipment, and all variations in width and gauge. This type of wage scale is not common in the United States, even in the textile industries, although these have the reputation of continuing European traditions of production to a greater extent than other industries.

The lace workers have attempted to gain economic security by seeking high wages and unemployment insurance, to offset the losses from irregular employment and prolonged depressions. Two distinct points of view are held with regard to the relation of wages to the seasonal character of the industry. Many of the manufacturers contend that lace products are luxury articles for which the demand is very elastic, and that higher wages mean higher prices, resulting in a decrease of sales and eventually of the earnings of the worker. They cite the overdevelopment in both the lace and lace-curtain industries

to support their contention, emphasizing the fact that the demand for laces has never been sufficient for the operation of plants at full capacity. Other manufacturers and many of the workers maintain that lace products have become a virtual necessity, and that the market is capable of indefinite expansion. While this view may appear to overlook the effects of style changes in a fashion trade, it rightly emphasizes the opportunity of the manufacturer to initiate styles. In the case of lace curtains, those holding this view would maintain that some form of window covering is considered essential in all income groups, and the sales problem is therefore one of securing the market against foreign competition and against other types of window draperies. In the absence of any scientific research on the effects of advertising and sales policy, and on the relation of wages and other costs to prices, and prices to demand, no conclusions are possible.

The union's effort to obtain unemployment insurance is probably a move in a better direction than a continuous request for higher wages. The purpose of an unemployment-insurance scheme is to place sufficient burden on the employer in a seasonal industry to make it worth his while to secure orders and keep the plant running for as long a period as possible. A smoothing of the seasonal fluctuations, by spreading employment over more working-days in the year, lowers the cost of insurance to the employer, and affords greater regularity of employment and income to the worker. The plan proposed by the lace-curtain weavers provides for contributions from the employers and the employees to the extent of two per cent of the pay roll, a figure which was estimated to cover the risk in an average year. Although the plan did not become operative on a national scale, it is being gradually adopted in the various local branches; and it is greatly to be hoped that such a plan may eventually come into force throughout the entire industry.

The efforts of the union to shorten the working-day were successful in 1907, when the nine-hour day was obtained; but more recent attempts to secure the 44-hour week have thus far been unsuccessful. The manufacturers and workers are in this matter faced with one of the big engineering problems in all textile industries, that of securing the same or increased production with a shorter working-day. The lace operatives, like many craft and industrial unions, are becoming interested in the technical problems of production and could undoubtedly give valuable support to a joint program of production reform. Trade-unions can no longer afford to ask for shorter hours and more pay, with no interest in the effects of curtailment of production and the source of wage increases.

The collective-bargaining structure also provides for joint control of working conditions in the shop. Present shop rules continue the long-established practice of requiring payment for all spoiled work for which the management is responsible, as in the case of broken or inadequate equipment or insufficient instructions. Since few workers can make all classes of goods, and since the condition of the machine and its equipment is such an important factor in the quality of the product as well as in the earnings of the worker, the weavers have endeavored to prevent discharge for inefficiency wherever possible, but have permitted dockage and other penalties

in the form of transfers to poorer machines or different grades of work. The result has been that few discharge cases are found, and the majority of local or shop disputes center in questions of responsibility for spoiled work and the interpretation of shop rules. The highly specialized skill of the weaver, which is of no use in other industries, has thus been compensated by assurance of tenure in the job, and protection against excessive dockage and other shop grievances. This has come as the result of a long struggle and the slow evolution of a code of rules and machinery for the settlement of disputed cases. It can not be too strongly emphasized that trade customs, working rules, and methods of handling shop grievances are of major importance in industrial relations. This is true of both unionized and nonunionized industries.

The labor relations in the lace and lace-curtain industries are unique in some respects, but have points of fundamental similarity with a large number of small scattered trades of highly skilled workers. Their differences are of degree rather than kind. Wherever the skilled crafts dominate an industrial situation because they perform a "key" operation in the production process, and when such operations require highly specialized skill, strong craft unions will be found, with emphasis on protection of the present occupants of jobs against all newcomers. If, in addition, the work is seasonal or subject to long periods of depression, high rates of pay, shorter hours, and elaborate codes of protective working rules will be developed. In the lace and lace-curtain industries, dependence on tariff protection and style changes has accentuated the risks of the industry for both the workers and the manufacturers. The general public sees only an undue emphasis by craft unions on security in the job and protection of the workers' standard of living, and fails to trace this back to the economic conditions in the industries which place a premium on insecurity of employment, and thus force a large burden of industrial risk upon the workers.

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APPENDIX

TABLE 1.—IMPORTS OF NOTTINGHAM LACE-CURTAIN MACHINE PRODUCTS, 1898 TO 1923

[Source: United States Tariff Commission, Preliminary Report on Lace, Washington, December 1, 1923, p. 14. Figures include nets and nettings under act of 1909, and act of 1922]

Period	Quantity (square yards)	Value	Period	Quantity (square yards)	Value
1897-98.....	1, 679, 659	\$152, 776	1913-14 (Oct. 4, 1913 to June 30, 1914).....	726, 836	\$111, 212
1898-99.....	2, 471, 369	222, 720	1914-15.....	740, 056	97, 938
1899-1900.....	2, 642, 323	228, 832	1915-16.....	467, 368	67, 106
1900-01.....	1, 879, 732	188, 395	1916-17.....	327, 872	60, 364
1901-02.....	2, 208, 658	228, 481	1917-18.....	173, 465	38, 528
1902-03.....	2, 126, 478	213, 465	1918 (last half).....	79, 226	27, 603
1903-04.....	2, 105, 533	204, 075	1919.....	144, 987	50, 240
1904-05.....	986, 899	96, 391	1920.....	361, 813	144, 089
1905-06.....	631, 216	73, 485	1921.....	407, 883	55, 097
1906-07.....	670, 735	81, 708	1922 (Jan. 1-Sept. 21).....	85, 400	28, 110
1907-08.....	556, 296	71, 812	Annual average (under act of 1913).....	390, 919	75, 818
1908-09.....	690, 873	79, 063	Annual average (July 25, 1897-Sept. 21, 1922).....	1, 139, 672	140, 479
1909 (July 1-Aug. 5).....	150, 597	20, 948	1922 (Sept. 22-Dec. 31).....	77, 925	25, 634
Annual average (under act of 1897).....	1, 556, 721	154, 683	1923 (Jan. 1-Sept. 30, 1923).....	227, 717	73, 119
1909-10 (Aug. 6, 1909-June 30, 1910).....	1, 376, 288	191, 441			
1910-11.....	1, 687, 530	261, 193			
1911-12.....	1, 761, 266	278, 868			
1912-13.....	1, 245, 028	200, 280			
1913 (July 1 to Oct. 3).....	373, 599	62, 419			
Annual average (under act of 1909).....	1, 547, 338	238, 739			

¹ Preliminary figures.

TABLE 2.—VALUE OF IMPORTS OF COTTON LACE PRODUCTS, 1912 TO 1922, BY COUNTRY FROM WHICH OBTAINED

[Source: United States Dept. of Commerce. Bureau of Foreign and Domestic Commerce. Foreign Commerce and Navigation of the United States, annual reports, 1913 to 1921. Also Monthly Summary of Foreign Commerce, December, 1922, and December, 1923, p. 53.]

Lace curtains

Period	England	Switzer- land	Ger- many	France	Japan	Scotland	Total
1911-12.....	\$263, 329	\$310, 537	\$5, 503	\$211, 777	—	\$39, 903	\$837, 759
1912-13.....	195, 517	344, 241	6, 772	141, 621	\$234	25, 429	719, 671
1913-14.....	199, 550	389, 169	10, 465	125, 942	—	23, 530	752, 389
1914-15.....	136, 408	329, 605	2, 753	97, 071	12, 507	9, 523	593, 412
1915-16.....	86, 239	322, 501	—	24, 912	9, 845	4, 335	449, 843
1916-17.....	81, 256	352, 855	—	30, 339	8, 693	10, 232	491, 447
1918 (July-Dec.).....	59, 034	63, 303	—	4, 124	1, 542	12, 378	149, 911
1919.....	49, 459	123, 431	—	5, 901	13, 402	1, 111	194, 520
1920.....	150, 633	877, 194	2, 791	28, 651	21, 943	6, 135	1, 097, 903
1921.....	40, 356	456, 464	13, 445	34, 872	9, 003	629	567, 474
1922.....	—	—	—	—	—	—	767, 786
1923.....	—	—	—	—	—	—	722, 878

Machine-made laces

Period	England	Switzerland	Germany	France	China	Total
1911-12.....	\$4, 341, 253	\$551, 044	\$3, 978, 093	\$4, 490, 342	—	\$13, 766, 453
1912-13.....	5, 953, 448	861, 708	4, 447, 231	5, 324, 102	2, 013	16, 981, 019
1913-14.....	7, 236, 552	651, 799	3, 706, 988	6, 645, 889	6, 929	18, 667, 616
1914-15.....	4, 839, 640	326, 699	2, 391, 880	3, 565, 848	3, 554	11, 431, 428
1915-16.....	5, 200, 313	702, 608	430, 999	4, 407, 803	6, 684	10, 963, 403
1916-17.....	4, 318, 552	710, 833	1, 110	3, 370, 074	36, 058	8, 616, 411
1918 (July-Dec.).....	2, 447, 222	149, 770	—	2, 060, 133	186, 028	4, 948, 662
1919.....	2, 860, 932	165, 500	71, 744	3, 915, 317	518, 507	7, 702, 498
1920.....	4, 040, 468	1, 018, 041	860, 752	4, 684, 149	1, 042, 289	12, 003, 224
1921.....	910, 399	399, 400	739, 582	4, 368, 121	2, 279, 181	8, 978, 147
1922.....	711, 413	381, 016	1, 146, 190	3, 066, 531	275, 181	5, 686, 109
1923.....	840, 318	411, 198	2, 918, 032	4, 821, 579	98, 302	9, 259, 362

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*The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively, beginning with No. 101, and up to No. 236; they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus * are out of print.*

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