Industrial Research Department
Wharton School of Finance and Commerce
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Philadelphia

RESEARCH STUDIES
XX

THE PHILADELPHIA UPHOLSTERY
WEAVING INDUSTRY

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THE PHILADELPHIA UPHOLSTERY WEAVING INDUSTRY

A CASE STUDY OF A DECLINING INDUSTRY IN AN OLD MANUFACTURING CENTER

BY

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From the Unions: Mr. Harry Bowers, Mr. William Chalmers, Mr. George Creech, Mr. Robert W. Gaffney, Mr. Frederick Lauterwasser, Mr. John Preston, Mr. James Skinner, Mr. Herman Stein, and Mr. Harry E. White.

From the Mills: Mr. Joseph Bracegirdle, Mr. Marshall Brooks, Mr. A. Vinton Clarke, Chairman, Mr. George E. Ingersoll, and Mr. Bert Newton.

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August 1932

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CHAPTER I

THE WAGE DISPUTE OF 1930-1931 AND ITS OUTCOME

C. CANBY BALDERSTON

An economic crisis had long threatened the Philadelphia upholstery weaving mills, but public interest became aroused by the wage dispute and strike of 1930-1931. After years of peaceful labor relations, changing competition in the industry led at last to industrial warfare. The strike was at once the culmination of a long decline in the Philadelphia industry and the beginning of an acute crisis.

The industry had faced difficulties of increasing seriousness. In the last decade, new competition from lower-cost areas undermined the dominance of the local mills. Not only did new domestic competitors take away the business in the cheaper fabrics, but imported goods offered competition in the high-grade, expensive fabrics. Caught as it was between the upper and nether millstones of a grinding competition, the Philadelphia industry gradually dwindled, and its relative position in the trade declined.

Inevitably the standards of the trade broke down. The best designs were copied in cheaper materials, and the evil of piracy contributed to the lowering of quality. The consequence of piracy is price-cutting. The urgent quest of the mills for volume, combined with large distress stocks of imported merchandise, caused prices to be undermined. What had been a highly profitable business, exhibited the worst signs of "cut-throat" competition.

The breakdown of standards extended until it affected the labor policies and solidarity of organization of both the manufacturers and unions. The Philadelphia Upholstery Manufacturers' Association failed to stop price-cutting and copying by outside mills. Nor did it force its own members to abstain. The upholstery unions likewise failed in their efforts to unionize workers and raise labor standards in the mills in new competitive areas like New Jersey and the South.

Faced with this changing competitive situation, the unions sought to maintain their wage and other standards by a policy of "standing pat." Having won their demands in more prosperous years with uncommon ease, they were not prepared to meet adversity and its problems, except by stubborn defense. Accustomed to success, the unions failed to divest themselves of inflexible tactics in favor of those which would take account of economic changes. This inflexibility widened the labor cost differential between Philadelphia and competing mills, and invited new competition.

In consequence, about a third of the Philadelphia mills established branch plants in lower cost regions outside the city so that they could continue to produce fabrics at low cost. Finally, the local mills demanded a reduction of wages in Philadelphia. Notices were posted in the majority of the mills that, starting January 1931, wages would be reduced 25 per cent. Then employers and unions locked horns over the first wage dispute which the local industry had had since 1921.

Failing to reach a decision, the manufacturers and the unions appealed to certain members of the Industrial Research Department of the University of Pennsylvania to arbitrate the dispute. Not only was this recourse to arbitration a new step in their industrial relations, but the unions for the first time introduced into the joint negotiations an outside specialist to present their case, and demanded that the agreement, when drawn, should be signed. Previous agreements in the industry, in keeping with the informality of its labor relations, had been unsigned.

In the hearings before the arbitration board, the manufacturers brought out the continued loss of market because of the competition of non-union areas with lower wage scales, and insisted that wages must be reduced if the industry were not to leave Philadelphia entirely. The manufacturers asked also for the amelioration of certain union restrictions. In reply, the unions pointed out that a wage cut in Philadelphia would be met by similar reductions in competing areas. The weavers, in particular, claimed that their average earnings, with full-time employment, were inadequate for a "health and decency" standard of living. The workers argued that the selling price of Philadelphia goods could be reduced by other methods, such as economies in selling and production, and that the lack of orders was primarily the result of the general business depression.

The board made a temporary award to remain in effect for six months to permit the making of a thorough survey of the industry as a basis for a permanent award.[1] The decision provided for a temporary wage reduction of 14 per cent. The board was influenced in its decision, by the decline in the cost of living, and the fact that a smaller "cut" would not be effective in aiding the Philadelphia mills to maintain their relative position in the industry. Although the upholstery unions had originally agreed to abide by the decision of the arbitrators, the weavers refused to accept the award. There were, however, certain ameliorating circumstancs involved in their refusal.[2] The weavers gave notice to the manufacturers that they would cease work in a month's time. And so, in February 1931, the strike began.

It is significant that only two of the city's upholstery weaving mills attempted to operate with strike-breakers. The other mills closed down. But while pickets were on guard around the oldest and largest mill in the city, looms were moved out and operated in a small industrial town outside of the city.

The strike lasted about three months, and ended on May 4, 1931, with the acceptance by the local weavers' union of

[1] Later developments led to the negotiation of agreements between the unions and the manufacturers' association, which made a permanent award unnecessary.

[2] For a detailed discussion of this arbitration, see Palmer, Gladys L., *Union Tactics and Economic Change,* Chapter IV.

the terms of the arbitration decision. Then followed a step quite unprecedented in the history of local industrial relations. Three of the unions in the industry[3] and the Philadelphia Upholstery Manufacturers' Association jointly requested an impartial agency, the Industrial Research Department of the University of Pennsylvania, to undertake an investigation of the industry. Both sides promised to furnish all necessary information, the manufacturers agreeing to open their books so that the study might include the income, expenses, and profits of the local mills. This request on the part of the industry set the stage for the study described in this report.

This survey was conducted during the period June-December 1931, by five members of the Industrial Research Department. To serve as a connecting link with the industry, a joint advisory committee was formed on which were represented the manufacturers' association and the three coöperating unions. Delegates from other unions in the trade also met with this committee unofficially. This link with the industry proved helpful in bringing to light the troubles of the industry, in guiding the investigators on technical matters, and in checking the practicality of the suggestions. Moreover, this contact kept both unions and manufacturers informed as to the progress of the study, and prepared them to better understand the reasons for its findings.

Two months prior to the completion of the survey, the weavers' union and the manufacturers' association each retained a labor adviser to guide them in using the results of the study in the ensuing negotiations. It was felt that the report would not be of maximum service to the industry unless expert counsel were made available to help put the suggestions into effect. These two labor advisers and the joint advisory committee previously mentioned have an essential place in the technique here employed.

What may be the significance of such coöperative research?

[3] The Upholstery Weavers' Union, Local #25.
The Warpers' and Warp Dressers' Union, Local #1025.
The Jacquard Fixers' Beneficial Union #1, Local #1270.

It is far too soon to appraise its influence upon the destinies of the local industry. It seems reasonably certain, however, that in the ensuing negotiations, between January and April, 1932, the establishment of the pertinent facts relegated to the background much of the bickering over mere questions of fact. The use of the report in the negotiations tended to place emphasis upon constructive action of long-run advantage to the industry as a whole.

It is somewhat more easy to outline the results hoped for, even though actual events may never permit these hopes to be fully realized. The immediate aim, which has been mentioned already, was to provide a factual basis for the settlement of the wage dispute, and for the stabilization of the industry. The study thus undertook the difficult task of determining the causes of the industry's troubles, and of showing how these might be minimized by fundamental changes in marketing, production, and labor policies. It was hoped that a thorough-going analysis of all the factors contributing to the decline and economic crisis in this trade might increase the available knowledge as to the causes of general business instability and the methods by which they may be counteracted. The attainment of these ends required the simultaneous study of employee earnings, industrial relations, and production, marketing, and financial problems. Naturally a study of all of these aspects was possible only through the full coöperation of both employers and workers. Perhaps the unusual quality of that coöperation may earn for this report a place among the studies of industrial stabilization.

The data, findings, and recommendations connected with the investigation are presented under the headings indicated below.

The history and economic characteristics of the industry
Collective bargaining
Earnings and working opportunity
Production problems
Marketing problems
Financial data
Findings and recommendations

CHAPTER II

HISTORY AND ECONOMIC CHARACTERISTICS OF THE INDUSTRY

GLADYS L. PALMER

History of the Industry

The weaving of a fine grade of drapery and upholstery goods is one of the oldest of Philadelphia's textile industries. It was started in the seventies and eighties by weavers who came from the Yorkshire district of England and from Scotland, although a few of the founders of the trade were American-born of English parentage. The majority of the present group of twenty-six upholstery weaving mills in the city were established prior to 1900. The foundations for two of the original mills were laid in early experiments with small units of hand looms, weaving reps and terry cloth. As the industry became established, new fabrics were added to the original products. Chenille weaving was, for many years, the most important work of early mills in the trade, but brocades, damasks, and brocatelles, of silk and mercerized cotton yarns were made by a few specialty mills. Madras curtains, couch covers, table scarfs, and portieres made up the greater bulk of the industry's product in the years from 1890 to 1905. After this period over-draperies and light-weight window curtain fabrics were added to the products of the mills. A small amount of fine-grade wool tapestries had been made in a few mills in earlier years, but the major development of tapestry production came after the war period. Tapestries for furniture coverings were then made of cotton and rayon yarn rather than of wool. During this long period of development of the industry, mercerized cotton yarns gave way to rayon, and wool and worsted yarns to cotton, as the important raw materials. Silk continued to be used but only for the most expensive fabrics.

The upholstery fabrics produced in Philadelphia represent a high type of technical designing and weaving skill. The heavier fabrics are double- or triple-woven. The looms usually carry two or more sets of warp yarns and two or more sets of filling (weft) yarns. A jacquard attachment introduces the design into the fabric. In tapestries, for example, the pattern is formed by the weft threads, and the surface of the material may be composed of weft threads only. In some fabrics the face of the goods resembles the reverse side, but most upholstery goods are not reversible. Variegated colors may be introduced by either the warp or filling yarns, but, if many changes of shuttle are necessary in introducing color by the weft yarns, the fabric becomes a "slow-weaving" job. The background of some fabrics, for example brocaded damasks and tapestries, may carry subsidiary patterns formed in the weaving process, while the major patterns are introduced by colors in raised or flat effects. When not wanted on the surface, the threads are woven into the center and back of the fabric, or float for short lengths on the back. The construction of the fabric is, therefore, as important as the outline of the design, the combination of colors, or the quality of the yarns in any consideration of the goods made in the Philadelphia industry.

None of the fabrics for which the industry is noted actually originated in Philadelphia, although it is claimed by one Philadelphia designer that modern machine-made tapestries received their highest technical development here. The machine-made fabrics are, of course, adaptations or copies of the products of the hand loom. It is interesting to note that most of the modern weaves of textile fabrics were developed by ancient or primitive peoples.[1] They later reached a high stage of perfection in the medieval period in China, Japan, Spain,

[1] Mr. M. D. C. Crawford claims that all of the modern weaves were developed by the Ancient Peruvians. *Anthropological Papers of the American Museum of Natural History*, Vol. XII, p. 90.

Italy, France, and Belgium. The Italian and Flemish towns of the Renaissance period were especially noted for their fine silk damasks, brocades, and velvets. France became famous for the production of beautiful silk fabrics under the patronage of the Bourbon kings. Fine tapestries and furniture coverings were also made in France and England during the medieval and modern periods.

The development of designs as well as the technique of weaving fine fabrics has also passed through a long period of evolution. Some of the most beautiful designs of today contain elements which can be traced to the earliest work of craftsmen of primitive and ancient times. It is claimed that the eastern and early European patterns show more beauty of detail and harmony of mass and line than are found in the later fabrics. The gradual elaboration of the methods of weaving and the growth of wealth in modern Europe led to a reliance, by eighteenth century weavers, on fancy weaves and texture rather than on beauty and simplicity of design.[2] The machine industry, therefore, inherited a tradition of emphasis on texture and weave rather than on design, and for this reason, the designing of the machine-made fabrics was influenced largely by technical rather than artistic considerations.

The machine manufacture of fine fabrics for draperies, wall hangings, and furniture coverings developed in France, Belgium, Italy, and Germany. Fine silk fabrics were also made in England. The major centers of the European industry, at the present time, are the Pisa district of Italy, the Brussels district of Belgium, and the Roubaix-Tourcoing district of France. In these centers, the traditions of hand-craft weaving and the presence of a variety of trades using artistic designs have led to the development of a high-grade, luxury-product industry maintaining the artistic standards of the finest of European hand-made products.

The American industry was handicapped at its inception

[2] Glazier, Richard, *Historic Textile Fabrics*, p. 94.

by the absence of the technical skill and artistic traditions of the Belgian and French fine-fabric centers and also by the contemporary styles of interior decoration in the late Victorian era. Technical skill gradually developed in this country as the result of the importation of weavers and designers from Belgium, France, and England. But, in the "gay nineties," the standards of taste in interior decoration left much to be desired. This period was the era of the brown-stone front, the formal parlor, and dark-colored walls and hangings—the "brown decades." It has been described as "the full tide of the draped scarf orgy."[3] Turkish "cozy corners" and elaborately draped furniture led to a demand for novelty textile fabrics in large quantities. These started the Philadelphia upholstery weaving industry on its road to prosperity.

The Philadelphia trade, therefore, originated as a luxury-product industry, producing a wide range of fabrics for interior decorating purposes. A few small firms specialized in the making of drapery fabrics only, others in the making of couch covers, scarfs, portieres, and novelty goods, and still others in furniture coverings. The larger mills made a wide variety of fabrics. Gradually the mills built up a reputation for certain types of fabrics or for quality workmanship and high-grade designing. Prior to 1919 the demand for the products of the industry was relatively inelastic, as in other luxury-product trades. The development, by the manufacturers, of certain trade practices or understandings with regard to problems of trade competition protected high-grade designs from cheaper imitations and kept prices somewhere near profitable levels. Style changes in interior decoration and general levels of prosperity in the community were the most important economic factors in the prosperity of the trade.

After cotton tapestries for furniture coverings became the chief product of the industry in the years following 1919, the prosperity of the trade became still more dependent upon

[3] *The Upholsterer*, December, 1923, p. 97.

the building and furniture industries. This change of the trade accompanied an expansion period in building. New homes, new hotels, and new theaters were built in rapid succession, and the demand for furniture fabrics and draperies increased. The trade expanded rapidly to meet this increased demand and enjoyed exceptional prosperity. More jacquard machines were sold between 1919 and 1921 than in any other three-year period in the history of the industry. The number of workers employed in the industry increased. Old mills were reorganized or expanded and for the first time in their history many of them were incorporated. Most of the expansion of old Philadelphia mills during this period took the form of the establishment of branch plants outside of the city. Weaving mills in other areas converted their looms to the manufacture of upholstery goods. A number of new mills were started. The latter were not located in the Philadelphia area, however, but in the rural towns of New Jersey and the South. Philadelphia continued to offer some advantages as a specialized manufacturing center, because of nearness to style centers, and specialized dyeing, harness-building, designing and card-cutting facilities, and the presence of a skilled labor supply. These advantages, however, were eventually more than offset by higher labor costs in Philadelphia, the only unionized center of the industry. In the newer centers of manufacture, workers received lower wages for longer hours of work, and weavers frequently ran more than one loom.

The recent expansion and decentralization movement in the industry led not only to a widening labor cost differential between Philadelphia and outside centers, but also to general over-expansion of the trade. As a result, very keen competition developed between Philadelphia and outside mills. The details of this competition and its effects are told in later chapters. It is sufficient to say, for the present, that the effects of the competition, combined with certain general changes in the demand for the products of the industry, led to the rapid decline of the Philadelphia trade in the years following 1925, and particularly from 1928 to 1932. The cheaper grades of goods demanded by consumers could be made by less skilled labor in outside manufacturing centers. Well styled and well designed fabrics developed by Philadelphia mills were copied in cheaper yarns and poorer quality of workmanship by outside competitors, and soon displaced the better grades of goods. The Philadelphia trade found itself in a difficult competitive position in 1931. It still retained a competitive advantage in the manufacture of the highest grade of specialty or novelty fabrics, but for these fabrics there was relatively little demand. In the cheaper grades of goods, competition was on a "price" basis, and the city's mills were at a disadvantage, chiefly because of the labor cost differential between Philadelphia and outside manufacturing centers.

Economic Characteristics

In common with other small-scale, specialty textile trades, the upholstery weaving industry had once marketed its product entirely through jobbers and retail stores. After its recent expansion, however, as much of its product was sold to furniture manufacturers as to jobbers. The decline in the relative importance of the jobber had an important effect in increasing the amount of finished stock carried by the mills and the accepting of more small orders. The trade has always been characterized by short orders because of its manufacture of decorative fabrics, the market for which is spoiled if there is too much duplication of patterns. But in recent years, the length of orders has become too short for economical production. Although originally confined to the most expensive patterns, short orders are now found in the cheapest ones as well. The problem of short orders and requests for immediate delivery make it difficult, if not impossible, to control production in the mill and to effect any of the production economies which come only with long-run orders. Short runs not only demoralize production planning by the manufacturer but increase the irregularity of employment and of workers' earnings.

As one might expect in a small-scale industry, making a