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THE DECLINE OF A COTTON TEXTILE CITY

BY

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A Study of New Bedford

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INTRODUCTION

"The stacks of great mills have replaced in the skyline the masts of ships."
New Bedford *Mercury*, Centennial Anniversary Supplement, 1907.

ON the northeast corner of the New Bedford Free Public Library stands the city's most famous monument—the Whaleman's Statue. Not much farther away, near the banks of the Acushnet River on famous Johnny-Cake Hill is the whaling museum whose center of attraction is a replica of a whaling boat which is half as large as the original. And a stone's throw away, amid the twentieth century hustle and bustle, stands a clothing store whose sign announces to its customers that there they will still find "The Whaling Outfitter."

It does not take the visitor to New Bedford very long to realize the deeprooted tradition of the sea that prevails throughout the city. And if he bothers to familiarize himself with a little of its history [1] the reason will become quite evident, for it was less than one hundred years ago that New Bedford grew and prospered as the largest whaling center in the United States and it was as late as 1925 that the last whaler left the port of New Bedford.

Like many other New England cities which lay on the water, New Bedford turned from its predominantly agricultural pursuits to engage in trade at an early period in her history. Unlike the other cities which followed the normal diversified trading channels, however, New Bedford found herself specializing more and more in the whaling trade and became, at an early date, a one-industry town. Accompanying the very profitable trade in whales were a host of other industries, all dependent

1 See the *New England Magazine*, September, 1898 (Vol. XV, No. 1), p. 97. There are many histories of New Bedford among which are *The History of New Bedford, Bristol County, Massachusetts*, by D. Ricketson, New Bedford, B. Lindsay, 1858; *History of New Bedford and its Vicinity, 1602-1892*, by L. B. Ellis, Syracuse, N. Y., D. Mason and Company, 1892; *History of New Bedford, Massachusetts*, by Z. W. Pease, Lewis Historical Publishing Company, N. Y., 1918.

upon whaling. While ship-building, sailmaking, sparmaking, rigging, ropemaking, cooperage, ship blacksmithing, and the making of ship bread (for provisions) supplied the whalers, other industries, such as oil refining and candlemaking, depended upon the products of the whalers, i. e., sperm and whale oil and whalebone.

The oil wells of Pennsylvania, however, spelled the doom of whaling in New Bedford. Up to the latter part of the nineteenth century whale and sperm oil were important sources of fuel for lighting and lubricating purposes. Their price was high, however, and led to a search for substitute fuels. It resulted in the adulteration of sperm oil (which was easily accomplished) and the introduction of lard oil which soon became a serious competitor. The finishing blow was dealt when petroleum was discovered in Pennsylvania, sharply restricting the market for the important products of New Bedford's whaling industry.

The Development of Cotton Textile Manufacturing

In 1846, in the midst of its prosperity as the whaling center of the country, New Bedford witnessed the incorporation of two cotton textile mills. One was the New Bedford Steam Company which soon expired in its infancy; the other was the Wamsutta Mill, now 97 years of age and still going strong. Both are worthy of study, the former because its demise can be traced to the same symptoms which affected other early cotton textile mills in that region, the latter because its success made others follow in its footsteps and resulted in the rapid growth of the cotton textile industry in New Bedford.

In Appendix A will be found excerpts from a diary kept by Samuel Rodman, treasurer of the New Bedford Steam Company. In recording the trials and tribulations of this ill-fated company, it describes better than anything else could the obstacles which stood in the way of the successful operation of a cotton textile mill in New Bedford at that time. The difficulty of obtaining adequate capital, poor machinery and other equipment, and

trouble with the labor supply militated against the company's success from the start.

Even at this time the South was emerging as a competitor. Before the mill was finally transferred from New Bedford to another community, an attempt was made to move to Georgia where operating conditions seemed to be more favorable. Thus, the first mill to be set up in New Bedford, the mill that was to herald the beginning of cotton textile manufacturing in the city, forecast the shift to the South.

In direct contrast to the fate of the New Bedford Steam Company was the early success of the Wamsutta Mills,[2] whose age and influence has made it an institution in the eyes of New Bedford citizens. The success of the Wamsutta Mills, however, did not give rise to the incorporation of more cotton textile mills. Response to the success of this venture in cotton textile manufacturing was delayed because of continuing prosperity in the whaling trade. In fact, it was a decade after the Wamsutta Mills began operations that the zenith of New Bedford's prosperity in whaling was reached. Under such conditions it was difficult to interest local capital in new manufacturing enterprises.

Decline of the whaling industry removed the most important obstacle in the way of the growth of cotton textile manufacturing in New Bedford. Investors with capital accumulated during the years of whaling prosperity were now eager to find a new source of investment and profit. The experience of the Wamsutta Mills pointed to such a new source and the growth of cotton textile manufacturing began.

Exactly a quarter of a century after the opening of the Wamsutta Mills came the incorporation of the Potomska Mills with an original capitalization of $600,000 (to be compared with the original capitalization of Wamsutta of $160,000). Potomska was an immediate success and thereafter new companies were organized in rapid succession. During the years of 1880-1899, fourteen new cotton textile manufacturing com-

2 Wamsutta was the name of an Indian who signed the deed conveying title to New Bedford to the Colonists in 1652.

panies were formed with an original capitalization of over six million dollars. The height of new incorporations was reached in the first decade of the present century when twelve new mills with an original capitalization of almost twelve million dollars began operations in New Bedford. By 1910, the city had become the center of the manufacture of fine cotton goods in the United States.

Thus, within a comparatively short time New Bedford successfully effected a transition from one economic pursuit to another. As the first ten years of the present century came to close, everything pointed to the fact that New Bedford had made a good choice in shifting to cotton textiles.

The War Years and After: Crisis and Depression

The World War and the years immediately following represented a period of unprecedented prosperity for the New Bedford cotton textile industry. Capital invested in the industry doubled in the seven years, 1914 to 1920. Loans and discounts extended by New Bedford banks, an important indicator of the level of commercial activity, also doubled. Average yearly wages paid to the employees of the cotton textile mills in the city in 1920 were two and one-half times as large as they were in 1914. Earnings of the cotton textile mills increased six-fold during the period; in one year (1920), the mills earned 34 percent on invested capital.

Broadly speaking, two factors were responsible for New Bedford's prosperity of this time. The first, not directly bound up with the war itself, was the large increase in the production of automobiles calling for a corresponding growth in the demand for tire yarn. Despite the fact that it was a fine goods center, New Bedford benefited from the rapidly expanding demand for tire yarn more than any other textile city. Although this yarn was a comparatively coarse product, the cotton used in its manufacture had to be combed for added strength. The combing process is associated with fine goods production, and

it was in New Bedford that the equipment and experience for combing could be found. Many mills abandoned their regular trade to concentrate on the production of this type of product and some cloth mills even closed their weave rooms and devoted their remaining equipment to the spinning of tire yarn.

The other factor explaining New Bedford's war prosperity lay in Government war orders for cotton textile goods. Throughout the war New Bedford mills were engaged in the production of airplane and cotton cloth, gas mask and bandage cloth and uniforms.

In concentrating their production upon the tire yarn and government orders, the cotton textile mills had made a grave decision. The decision involved concentrating upon spinning rather than weaving, yarn production rather than cloth production, producing the coarser rather than the fine and fancy goods. By getting away from fine goods and turning to more staple products of coarser construction, New Bedford exposed herself to competition from the South which led in the production of coarse cotton goods. The choice made during the war years laid the groundwork for the depression to come.

Throughout the nineteen twenties, as Southern cotton textile mills prevailed in the coarse goods market and were making steady inroads into the market for fine goods, the position of the New Bedford mills become inherently weak. The position of the New Bedford cotton textile mills was made even more critical in 1928 by the occurrence of the longest and severest strike in the city's history. The strike was called in opposition to a 10 percent wage cut and lasted for six months. The number of wage earners employed in New Bedford cotton mills in 1928 was half the number employed in 1927 and the amount of wages paid to these employees was almost fifteen million dollars less than the wages paid in 1927. During the same period, the value of cotton textile products produced by these mills was cut one-third.

The depression of the nineteen thirties dealt the New Bedford cotton textile mills their final blow. During this period, the city lost almost two-thirds of its cotton textile mills. With prevailing economic activity at a standstill, New Bedford became a typical example of a depressed one-industry city.

This briefly is the historical framework of New Bedford's decline up to the beginning of the second World War. The experience of more than a decade of deep depression, the long duration of unemployment among its workers, and the loss of more than one-half of its cotton textile mills left New Bedford poorly prepared to take advantage of the expansion in industrial activity occasioned by the second World War. In 1940, at the beginning of the defense program in this country, the Bureau of Labor Statistics index [3] of factory wage earner employment for New Bedford stood at 79.0. Of the 102 areas surveyed by the Bureau of Labor Statistics, only three (Duluth, Toledo, and Reading) had a lower index of employment than New Bedford in 1940. In fact, employment of factory wage earners in New Bedford in 1940 was (with the exception of 1932) at its lowest level since 1907—the first year for which such data are available.

By June 1942 the B.L.S. index of factory wage earner employment stood at 108.7—indicating that employment in New Bedford was slightly above the 1937 level. One year later (June 1943) the index was down to 105.8. Those cotton textile mills which remain in New Bedford are working full-time, and the city is gradually attaining a measure of prosperity under the impetus of the war program. The extent to which New Bedford's limited wartime prosperity will endure is inextricably tied up with what will happen in the post-war period and can hardly be foretold at the present time.

This study analyzes the causes and results of New Bedford's decline up to 1940 and the attempts made by the city to establish a new basis for its livelihood. The problem that New Bedford

3 Index based on 1937 = 100.

faced is posed in the first two chapters. As a background to the situation in the city, Chapter I discusses the problems of the cotton textile industry as a whole. Chapter II analyzes the returns from the WPA Survey of Employment and Unemployment in New Bedford conducted in May, 1939, and discloses the effects of New Bedford's decline upon the city's labor market.

Chapter III considers the causes of the city's predicament in terms of the factors responsible for the shift of the productive capacity of the cotton textile industry to the South. Some other important factors, such as poor management and control, and the effects of competition from fibers other than cotton are taken up in Chapter IV.

The last two chapters (V and VI) assay the results of New Bedford's vigorous campaign to induce new industry to locate in the city, and its efforts to preserve what was left of its cotton textile industry.

The author wishes to thank Professor Leo Wolman of Columbia University for his criticism and suggestions in preparing this report and Dr. John N. Webb, Chief of the Labor Market Research Section of the Work Projects Administration, under whose supervision the project was carried out.

PART ONE

THE PROBLEM

CHAPTER I

THE DEPRESSION IN COTTON TEXTILES

"As a matter of fact the North has again invaded the South, not as it did in 1860 with bayonets and cannon, but with spindles and looms."

From "Old Historical Sketches" by H. H. Crapo.

THE cotton textile industry has come a long way since eighteenth century English matrons were fined for wearing cotton garments. From the moment of their introduction into the country by the British East India Company in 1631 the popularity of cotton goods was assured. This popularity constituted a threat to the mainstay of the English economy—the wool trade. There then followed a series of parliamentary acts aimed at destroying the infant industry, going so far as to restrict the wearing of apparel made of cotton. Such measures, however, were doomed to failure. The ensuing Industrial Revolution was to a large extent the story of the mechanization of cotton textiles. The inventions of Kay, Hargreave, Cartwright, Crompton and Watt followed in quick succession and set the stage whereby the destinies of large areas throughout the world became inexorably linked with that of the cotton textile industry.

The most striking example of the dominance of textile manufacturing in the Old World is that of the Lancashire district in England whose proximity to coal gave it an excellent source of fuel to drive the new cotton machinery. The factory system of production eliminated spinning and weaving as a home industry and the district was drawn so completely into the orbit of cotton manufacturing that the word "Lancashire" became a synonym for cotton textiles. Since then the history of this area has been completely bound up with that of the industry, prospering when the manufacture of cotton goods prospered, suffering when it was depressed.

In the United States, because of certain advantages to be discussed in a later chapter, the cotton textile industry became localized in the New England area, and particularly in the state of Massachusetts. Cities such as Lowell, Fall River, Lawrence, Manchester and New Bedford turned gradually to the manufacture of cotton goods as their principal means of livelihood.

Until comparatively recent times the story of cotton textiles was one of continued and successful expansion. Hence these textile cities grew and prospered. But, at the same time, they incurred the risk which accompanies specialized as against diversified industrial development. By "putting all their eggs in one basket" they linked their industrial fortunes to those of cotton, with disastrous results in the long run.

The cotton textile industry has always been of great importance in this country. Since 1925 it has employed, on the average, more wage earners than any other individual manufacturing industry in the United States.[1] Not only has it ranked first as an employer of labor, it has also always been near the top in wages paid. Even in 1933, at the depth of the depression, the cotton textile industry paid out to its employees a larger amount in wages than any other individual manufacturing industry with the exception of steel. It has, also, practically always ranked among the first ten industries in value of product and value added by manufacture.

It is in the nature of its raw material and final products that the reasons for the industry's growth and importance are to be found. Cotton measured by any standard is the most important of the fibers. During the past twenty-five years it has accounted for approximately three-fourths of the major fibers consumed by mills in the United States. This has been true despite the fact that the cotton fiber is a comparatively short one (it is easier to spin a longer fiber). This shortcoming has been more than counterbalanced by its smoothness, flexibility and elasticity, and

1 Returns from the Biennial Census of Manufactures for 1937 indicate that the cotton textile industry was surpassed in this respect by the automobile and steel industries which experienced a large measure of recovery in that year.

the fact that one of its unique natural properties is its tendency to curl when dry. This curl or "kink" endows the cotton with a very great measure of adhesive strength.

In luster and fineness cotton is surpassed by silk and rayon. Wool is a better conserver of heat and linen retains its shape better. On the other hand cotton is cheap, has a good white color and is readily cleansed. The ease with which it can absorb dyestuffs and be waterproofed and the fact that it can either be processed to resist wear or be made soft and absorbent enhances its value from both the consumer's and producer's point of view.[2] The reason for cotton's supremacy is aptly summed up in the following statement: "Consumers have compelled the fibers to enter a decathlon contest and cotton, although it did not take first place, won by being up near the leader in all events."[3]

The products of cotton manufacturing are legion. The Bureau of the Census classifies cotton woven products over twelve inches in length into thirty-five general groups. They range from such fine goods as voiles, sateens and velveteens to sheets, towels, draperies and blankets for household use. In addition there is a wide range of products which satisfy the demands of other industries as diverse as furniture and tire manufacturing. Even a small list shows the amazing variety of these products. Cotton is a basic element in conveyor and power belting, typewriter ribbons, enameled ceilings in railroad cars, artificial leather and even synthetic ivory for billiard and pool balls.

These factors have endowed the cotton textile industry with a large element of stability, although there are a number of forces which work in the opposite direction. Again, there have been broad locational changes which have served to upset this stability in certain special areas, as was the case in New Bedford, Massachusetts. Yet the industry as a whole is a mature one. It no longer undergoes revolutionary changes in technique which

2 See Michl, H. E., *The Textile Industries*. The Textile Foundation, Washington, 1938.

3 Quoted in *ibid.*, p. 63.

force complete readjustment to newer methods. New technological developments, of course, continue to appear but the basic methodology of the industry is one hundred and fifty years old.

More important, cotton textiles satisfy one of the fundamental wants of man-clothing. Cotton goods are perishable and are continuously being worn out and replaced. The industry is thus in the enviable position of having a very stable demand for its product. As a result the cotton textile industry as a whole has not experienced any spectacular upward movement or any striking declines (excepting the abnormal development during the war). Evidence for this statement is found in Table 1 showing the movement of "active cotton spindle hours," which provide the best single index of activity in cotton textiles.[4]

TABLE 1 [a]

ACTIVE COTTON SPINDLE HOURS, UNITED STATES: 1922–1939

Year ending July 30	Active cotton spindle hours (000)	Year ending July 30	Active cotton spindle hours (000)
1922	89,308,614	1931	72,263,548
1923	101,931,101	1932	68,754,780
1924	84,359,693	1933	85,264,765
1925	91,054,615	1934	80,419,471
1926	93,941,081	1935	72,526,102
1927	102,605,403	1936	83,959,834
1928	96,451,050	1937	101,224,588
1929	99,604,009	1938	74,961,918
1930	87,515,224	1939	87,695,976

[a] U. S. Department of Commerce, Bureau of the Census.

At the same time the cotton textile industry has been subject to numerous factors of instability. Some of them have been characteristic of the industry since its inception; others are

4 Figures on "spindles in place" which are also available can serve as nothing more than an index of capacity in the industry since a company may have thousands of spindles in its mills yet have only a small percentage of them in operation. Another series, "active cotton spindles" is an improvement since it indicates how many of the spindles in place are actually working. Data on active cotton spindle hours go one step further and show the number of hours these active cotton spindles were in operation.

comparatively new. Together, they contributed to the present state of affairs not only in New Bedford, Massachusetts, but in the cotton textile industry as a whole.

Fluctuations in the Price of Cotton

One of the most important unbalancing factors in the industry is the unpredictable and considerable fluctuations in the price of the raw material—cotton. Characteristic of practically all annual agricultural products, the supply of cotton depends on such elements as the weather, plant pests (boll-weevil) and plant diseases (rust, root rot). Since a high proportion of United States cotton has been exported, its price has also depended on world conditions. As a result the price of cotton has fluctuated widely, especially since the World War. Immediately after the War (crop year of 1919) the average annual price of "middling upland spot cotton" [5] in New York was 31 cents per pound. The following year it was 38 cents and the next year the price was more than halved (18). The same wide fluctuation occurred during the ensuing decade and by 1932 the price per pound of cotton was down to 6 cents. Three years later it was double that price.[6]

Since the cost of raw materials plays a large part in the total cost of production of cotton mills, fluctuations in the price of raw cotton take on great significance. Although the relative importance of cotton as a cost factor varies from mill to mill and depends on the quality of goods produced, the fact still remains that in practically all cases, with the possible exception of some fine goods, raw cotton is the largest single item of expense.

These fluctuations in the price of the raw material inject a considerable element of risk into the industry. For example, should the price of cotton fall, the value of inventory (whether

5 A standard grade of cotton.

6 Full details on the price of cotton will be found in the *Cotton Year Book*, an annual publication of the New York Cotton Exchange.

in the form of raw material or finished product) automatically declines. Buyers will immediately point to the reduced price of cotton and demand a lower price for the manufactured goods. This obviously enough, upsets the calculations of the manufacturer and reduces his profit, if it does not wipe it out altogether.

Against the fluctuations in the price of the raw material the cotton manufacturer has no adequate defense. Some producers attempt to minimize the effects of these fluctuations by hedging, i. e., making simultaneous purchases and sales of cotton, one in the present or "spot" market, the other in the "future" market. Without going into detail concerning this process,[7] it suffices to say that such protection is inadequate since hedging can only be used in connection with standard grades of cotton. The advantages of hedging are also vitiated by the fact that the difference between the prices in the "spot" and "futures" markets is not always constant, with the result that a loss in one does not necessarily mean an equal gain in the other. Successful management in many cases, therefore, becomes a matter of shrewd cotton buying, at best a speculative venture which makes the cotton manufacturer vunerable at the very earliest stages of the production process.

Disorganized Marketing Procedure

Another factor making for instability in the industry is the almost complete separation which exists between the production and distribution of cotton textiles. A mill which has its own complete selling organization is the exception rather than the rule. The great majority of mills spin their cotton and then

7 Briefly and simply stated, hedging involves the purchase by a cotton manufacturer of, say, 100 bales of cotton in the present or "spot" market at 10c. per lb. At the same time he sells the same amount of cotton at the same price in the "futures" market. He expects to sell his cloth at 30c. per lb. The price of cotton, however, falls to 9c. per lb. and as a result he can only sell his cloth at 29c. per lb.—a loss of 1c. on the lb. However he can now buy cotton at 9c. per lb. and deliver it at 10c per lb. on the basis of the sale he made in the "futures" market. This profit of 1c. offsets the loss entailed on the cloth.

produce another raw material through the process of weaving —the "gray goods." These in turn must be "finished", i. e., bleached, dyed and printed. This finishing process is directed by the "converters" who control the marketing and distribution of cotton cloth.

Surrounding this rather simple core of the industry are a host of marketing organizations whose variety and number it is not necessary to describe in detail. The yarn merchants operate between the spinning and weaving mills. Selling houses, commission houses and cloth brokers operate between the weaving mills and the converters, finishing mills and industrial consumers of cotton goods. A similar group operates in connection with the wholesalers, exporters, the cutting trades and the retailers.

Most of these organizations are disassociated from the spinning and weaving mills. Their primary consideration is *volume* and not quality. This is to be expected since the size of commissions and margins upon which they operate depends on the quantity of goods they handle. What with severe competition in the bulk of standardized fabrics, the emphasis on volume is often disastrous.

All along the line fluctuations in the price of cotton, seasonal shifts in demand and style changes add to the difficulties. In the face of this a carefully mapped out long run marketing policy is difficult to devise, and alternating periods of glut and scarcity have become characteristic of the industry.

Fashion Changes

More recent years have witnessed the rising importance of fashion as a factor to be reckoned with. To most people this will call to mind the broad style changes e. g., the trend to short skirts in women's dresses in the nineteen twenties, that have affected the clothing industry. Such trends, however, although important to the cotton manufacturer, were gradual and of comparatively long duration and allowed for some readjustment by the mills.

Today, fashion changes have not only moved into practically every nook and cranny of the industry but have also increased in frequency. New designs, colors and patterns give free rein to the expression of individual taste and innumerable changes take place not only within a single year but within a single season.

It is in the field of apparel, of course, that such changes are most noticeable. Even such sturdy staples as ginghams and denims have felt the influence of fashion change. The time was when a producer of gingham could rely on a pretty stable demand for his product. Yet, tremendously popular in the early post-war years, gingham suffered an almost overnight eclipse when it went out of favor. Drab denim, usually associated with overalls, has been disguised to the point where it now appears in some of the most fashionable apparel.

TABLE 2

PERCENTAGE OF COTTON SPINDLE ACTIVITY, 1922–1934 [a]

Year and month		On a commercially possible basis [b]	Year and month		On a commercially possible basis [b]
1922	Jan.	57.2	1929	Jan.	64.2
	July	51.7		July	57.7
1923	Jan.	63.7	1930	Jan.	57.6
	July	51.7		July	38.5
1924	Jan.	56.3	1931	Jan.	46.1
	July	35.4		July	48.9
1925	Jan.	57.1	1932	Jan.	48.0
	July	49.6		July	29.2
1926	Jan.	57.9	1933	Jan.	53.7
	July	46.0		July	66.2
1927	Jan.	59.5	1934	Jan.	63.9
	July	57.4		July	49.6
1928	Jan.	58.7			
	July	46.0			

[a] United States 74th Congress, 1st Session, Senate Document, 126.

[b] Seventy-two hours per week in New England and 110 hours per week in the South prior to the NRA code period; 80 hours per week in both northern and southern mills under the code.

Household products have not been immune to these forces. Subtle changes in sheetings, draperies, curtains and upholsteries have made them subject to the same influences. Cotton textile products going into industrial consumption are also affected. Weave, weight and count of everything from tire fabric to wrapping twine may have their specifications changed at any moment.

Many of these fashion changes have served to widen the market for cotton textiles. Cotton goods have been put to use in ways which were never dreamed of as little as twenty-five years ago. The wide range of some of these products has already been mentioned. However, the severe pressure of frequent fashion change, especially in view of the lack of close relationship between the producer and distributor, has served to increase instability in the industry. In addition increased use of cotton goods in industrial consumption has made the industry vulnerable to the sharp changes in demand which affect the industries it serves, e. g., automobiles.

Excess Capacity

The existence of a large amount of unused mill capacity has virtually fixed an upper limit to the amount of profit to be made in cotton textiles. The appearance of any indication (true or untrue) that the market can stand some expansion immediately calls forth a wave of activity on the part of this idle capacity, with the inevitable results: overproduction and severely depressed prices.

An important factor making for excess capacity in the industry is the comparatively small amount of capital necessary to set up a mill. For the coarser grades of goods a mill with about 30,000 spindles would attain maximum efficiency. Insofar as *technical* efficiency is concerned a much smaller mill would in no way be at a disadvantage. Unlike such industries as automobiles, iron and steel or chemicals, large scale operations do not have any marked advantage in the cotton textile industry.[8]

8 See S. Kennedy, *Profits and Losses in Textiles*, Harpers, N. Y., 1936, p. 186.

Table 2 presents data reflecting the extent of idle capacity in the industry. On the basis of commercially possible operations the industry has not used more than two-thirds of its capacity even at peak periods, and at times it has fallen to a point where less than one-third of its capacity was being utilized.

The effects of such excess capacity is summed up in the following manner by a Cabinet Committee:

> Not only does the whole industry lunge forward at the slightest show of strengthening prices but the excess capacities put an almost irresistible pressure upon mills or groups of mills to overreach their share of the market, thereby gaining temporary advantages to the habitual unsettlement of the trade. So long as these excess potential capacities can be brought into play at the will of the individual mill owner, settled or stabilized price and operating conditions in the industry would seem to be unlikely.[9]

The factors which have just been discussed do not represent a complete list of the forces which have made for unsettled conditions in the industry. Others, such as competition between cotton and other fibers (especially rayon), the changing uses of cotton for clothing, household and industrial purposes, and the effects of foreign competition will be more properly discussed with particular reference to New Bedford, Massachusetts in a later chapter.

The Shift to the South

These forces serve as a background for the story of an inter-regional shift in the productive capacity of the industry. The shift has left in its wake a large number of distressed urban areas which were almost wholly dependent upon cotton textile manufacturing for a livelihood. It is this shift that has been at the root of most of the industry's troubles not only in the United States but throughout the world:

9 *Report on the Cotton Textile Industry*, a report prepared by a Cabinet Committee for the President of the United States, 74th Congress, 1st Session, Senate Document 126, Washington, D. C., 1935, pp. 112-114.

In general the changes in the textile industry as a whole, as well as in such special branches as cotton and wool, consist in the shifting of productive capacity, from older to newer centers of production.[10]

In England, the Lancashire district has experienced a drastic curtailment in cotton textile activity, the causes of which are directly related to the emergence of Japan as an important cotton goods center and to the progressive growth of cotton manufacturing in India. In recent years this area has been an excellent example of a severely depressed locality with a very heavy load of unemployed who have been out of work for a long period of time.[11] In India itself, productive capacity of the industry has for some time been moving away from Bombay to such regions of lower labor costs as Delhi and Nagpur.

In the United States this movement has taken the form of a transfer of the industry from the North to the South, or more specifically, from such New England states as Massachusetts, Rhode Island and New Hampshire to such southeastern cotton growing states as Georgia and North and South Carolina.

The shift from the North to the South will be discussed in greater detail in a later chapter. Here it suffices to refer to table 3 which presents data on active cotton spindle hours on a regional basis. As early as 1922 (the first year for which such data are available) the South was already responsible for a majority of the industry's activity. The role of this region has steadily increased and it is now safe to say that almost 80 out of every 100 active cotton spindle hours are accounted for by the cotton growing states.

10 *The World Textile Industry*, Economic and Social Problems, Report to the Tripartite Technical Conference, Washington, April, 1937. International Labour Office, Geneva, 1937, p. 344.

11 Fifty-one percent of the unemployed examined in Blackburn, which is located in the Lancashire district, were unemployed for 5 years or more. For an excellent discussion of the problem see *Men Without Work*, a report made to the Pilgrim Trust, Cambridge University Press, 1938.

TABLE 3[a]

ACTIVE COTTON SPINDLE HOURS, BY REGION: 1922–1939

Year Ending July 30	Active Cotton Spindle Hours (000)			% Active Cotton Spindle Hours in Cotton Growing States
	Cotton Growing States	New England States	Other States	
1922	47,841,112	36,783,240	4,684,262	54%
1923	55,776,192	41,271,278	4,883,631	55
1924	50,598,558	30,102,267	3,658,868	60
1925	55,912,066	31,201,215	3,941,334	61
1926	58,517,714	31,541,428	3,881,939	62
1927	65,864,979	33,052,210	3,688,214	64
1928	65,272,570	27,862,205	3,316,275	68
1929	68,360,571	28,252,639	2,990,799	69
1930	61,878,373	23,038,367	2,598,484	71
1931	54,482,213	18,757,156	2,024,179	72
1932	53,612,507	13,260,356	1,881,917	78
1933	66,366,030	17,231,255	1,667,480	78
1934	59,291,245	19,289,679	1,838,547	74
1935	54,642,532	16,244,634	1,638,936	75
1936	65,275,212	16,816,341	1,868,281	78
1937	77,666,587	21,227,767	2,329,964	77
1938	59,776,268	13,708,842	1,476,806	80
1939	69,230,908	16,726,062	1,739,006	79

[a] U. S. Department of Commerce, Bureau of the Census.

That this shift had a serious effect on the New England area has been a long recognized fact. The 1935 Cabinet Committee concluded after a study of the cotton textile industry, that:

The evidence is clear that mill closings in New England, which occurred largely prior to 1933 have left large stranded populations which will probably never be reabsorbed in cotton manufacture.[12]

More recently the International Labor Office's report has again called attention to the fact in the following words:

The movement of cotton manufacturing to the South has created in New England (in such cities as New Bedford, Fall River and Lowell, and especially in the smaller towns) a serious problem of

12 *Op. cit.*, p. 151.

more or less permanently "stranded population" similar to that of the "distressed or special areas" of the United Kingdom.[13]

The vulnerability of these cities which have come to depend on a single industry to such a large extent has thus been realized. With a severe and long-continued depression attacking the basis of their economy, the working population has found itself without any alternative means of support. A heavy incidence of unemployment and relief for those who had been reared and trained for work in the cotton mills, as well as for those who gained their livelihood from other minor trades in the city have been the consequences.

The Depression in New Bedford, Massachusetts

Dependent on the manufacture of cotton textiles which has been its major economic pursuit since the last quarter of the nineteenth century, the city of New Bedford, Massachusetts, became a typical example of an urban area left stranded by the shift of the industry's productive capacity to the South.

The extent of the city's dependence on cotton manufacturing is illustrated by the fact that up to the latter part of the 1920's more than $80 out of every $100 of capital invested in New Bedford manufacturing was invested in cotton manufacturing. In the same period more than 80 out of every 100 wage earners employed in New Bedford manufacturing were employed in the manufacture of cotton textiles, while more than three-fourths of the value of all manufactures was represented by cotton textile products. Despite the large inroads on the industry in the past decade, one-half of all wage earners in New Bedford manufacturing still gain their livelihood from cotton manufacturing and more than two-fifths of the value of all products manufactured in New Bedford is still accounted for by cotton textiles.[14]

13 *Op. cit.*, p. 115.

14 Data from "Annual Census of Manufacturing," Commonwealth of Mass., Department of Labor and Industries, Division of Statistics. Complete figures since 1907 will be found in Appendix B, Table 1.

The decline in New Bedford's major industry is attested by a comparison, on the basis of three standard statistical series (wages, average number of wage earners and value of product), of the trend in New Bedford cotton manufacturing with that of all manufacturing for the city, Massachusetts and the United States. For purposes of comparison three periods were chosen: 1925-1929 representing the years of prosperity; the depression years 1929-1932; and the period of recovery, 1933-1937. All figures have been translated into index numbers (1924-1926 = 100) and the data in table 4 are presented in the form of increases or decreases in these indices.

The data in table 4 fall into a very interesting and instructive pattern. For all of the series and for practically every period the four items being compared always keep the same rank. This order is maintained not only in the depression years of 1929-1933 but also in the prosperous and recovery years. Giving number one to the place showing the best record the rank is almost invariably as follows:

1. United States, all manufacturing
2. Massachusetts, all manufacturing
3. New Bedford, all manufacturing
4. New Beford, cotton manufacturing

Significantly enough, the trend in New Bedford follows a downward course not only in the depression years but also in the latter part of the 1920's and in the more recent years when industry as a whole was going through a period of recovery. In the years 1925-1929 when manufacturing as a whole was prospering in the United States, heavy losses were being registered in New Bedford and even in the State, an indication that the depression already pervaded this area before the general collapse of 1929. The advent of recovery saw the manufacturing industries of the United States and Massachusetts regain a substantial part of the losses they had suffered. In New Bedford, however, the loss in the number of wage earners in cotton textiles continued and the gains achieved in wages and value

TABLE 4[a]

Changes in Average Number of Wage Earners, Wages, and Value of Product in All Manufacturing in U. S., Mass., and New Bedford, Mass. and in the Cotton Textile Industry of New Bedford, 1925–1937

a. Average Number of Wage Earners, 1925–1937

(Changes in Index Numbers (1924–1926 = 100)

Date	United States, all Manufacturing	Massachusetts, all Manufacturing	New Bedford, Mass., all Manufacturing	New Bedford, Mass., cotton Manufacturing
1925–1929	+ 5	— 6	—11	—15
1929–1933	—33	—27	—28	—30
1933–1937	+30	+18	+ 9	—11

b. Wages, 1925–1937

(Changes in Index Numbers (1924–1926 = 100)

Date	United States, all Manufacturing	Massachusetts, all Manufacturing	New Bedford Mass., all Manufacturing	New Bedford, Mass., cotton Manufacturing
1925–1929	+ 8	— 3	—16	—19
1929–1933	—59	—47	—42	—47
1933–1937	+45	+33	+20	+11

c. Value of Product, 1925–1937

(Changes in Index Numbers (1924–1926 = 100)

Date	United States, all Manufacturing[b]	Massachusetts, all Manufacturing[b]	New Bedford Mass., all Manufacturing[b]	New Bedford, Mass., cotton Manufacturing[c]
1925–1929	+21	+ 6	—14	— 6
1929–1933	—43	—30	—29	—59
1933–1937	+37	+10	+ 6	+ 4

[a] Data for New Bedford and Massachusetts from *Annual Census of Manufacturng in Massachusetts;* data for U. S. from *Biennial Census of Manufactures*, U. S. Department of Commerce, Bureau of the Census. Complete figures will be found in Appendix B.

[b] Adjusted for price change by Bureau of Labor Statistics index of wholesale prices of all commodities.

[c] Adjusted for price change by Bureau of Labor Statistics index of wholesale prices of textile products.

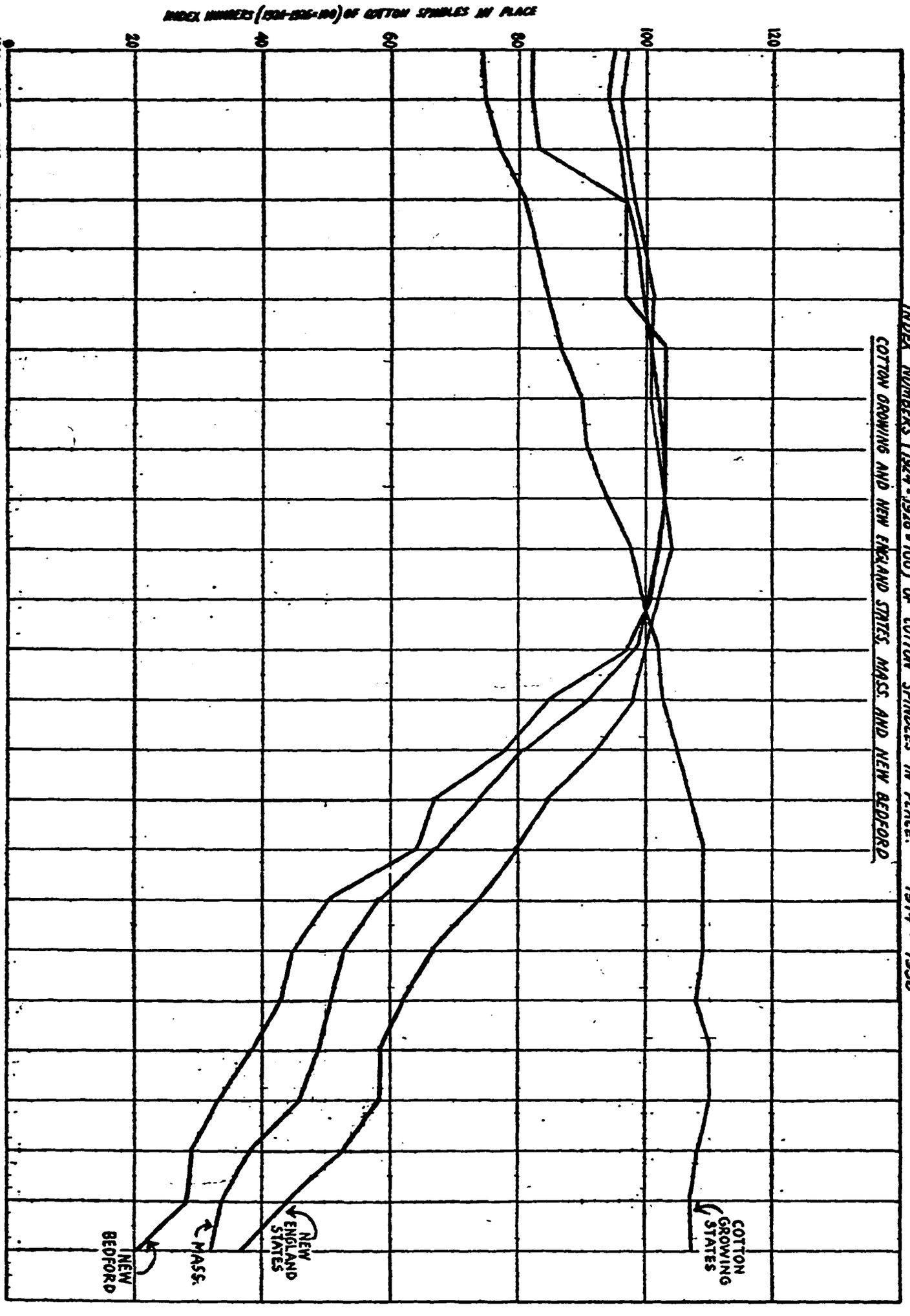


Fig. 1 INDEX NUMBERS (1924-1926=100) OF COTTON SPINDLES IN PLACE. 1914 - 1938

of product were relatively small. Such a contrary trend is indicative of the depression which has attacked New Bedford's major economic pursuit.

The distress in New Bedford is brought home more forcefully by a consideration of the changes in the number of cotton spindles in place in the city as compared with other areas. (See Table 5 and Chart 1.) They show a decline of more than eighty percent in cotton spindles in place in New Bedford during the period from 1925 to 1938. During the same period of time, spindleage in the South was increasing.

TABLE 5[a]

CHANGES IN THE INDEX NUMBERS[b] OF COTTON SPINDLES IN PLACE IN THE COTTON GROWING AND NEW ENGLAND STATES AND IN MASSACHUSETTS AND NEW BEDFORD, 1925–1937

Date	Cotton growing states	New England states	Massachusetts	New Bedford
1925–1929	+7	—20	—26	—34
1929–1933	+1	—21	—23	—24
1933–1937	—1	—20	—17	—15

[a] Data for cotton growing and New England States and Massachusetts from U. S. Department of Commerce, Bureau of the Census, New Bedford material obtained from individual cotton mills. Complete figures will be found in Appendix B.

[b] 1926 = 100.

UNEMPLOYMENT

The continued and considerable decline in cotton textiles produced, of course a high unemployment rate in New Bedford. As Fig. 2 shows, the unemployment rate in New Bedford, both in 1930 and in 1937, far exceeded that for all cities of 100,000 population or over in Massachusetts or in the United States as a whole. Although comparisons between the two censuses are not wholly valid because of the differences in defining unemployment, it is proper to compare unemployment rates between the different subdivisions within the same census.

As early as 1930 the percent of gainful workers unemployed in New Bedford was practically double that of the United States as a whole. One out of every ten gainful workers was unemployed.[15] Before the depression had really got under way, of the 93 cities of 100,000 population or more, New Bedford ranked tenth in percent of gainful workers unemployed. Ranking higher than New Bedford were such cities as Detroit and Youngstown, which suffered from the sharp decline in automobile and steel production, and Lowell and Providence, also heavily dependent on the manufacture of cotton goods.

Not much is available on unemployment by occupation and industry in New Bedford. Figures, however, are available for the largest occupational group in the cotton textile industry, the "operatives." This group represents the semi-skilled labor whose jobs involve the actual manufacture of the cotton goods. More than fifteen percent of the gainful workers who were operatives were unemployed in 1930, a rate which was more than one-third as large again as that for New Bedford as a whole.

The census of November 1937 disclosed that New Bedford's unemployment rate was again double that of the United States as a whole. By this time one out of every three gainful workers was unemployed.[16] Of the 93 cities of 100,000 population or more, New Bedford ranked second, only one-tenth of one percent behind the city of Scranton, Pennsylvania, another urban depressed area suffering from the long decline of anthracite coal-mining.

15 The unemployed included (under the Bureau of Census definition) Unemployment Class A—persons out of a job, able to work and looking for a job, and Unemployment Class B—persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle.

16 The unemployed included those "totally unemployed" and emergency workers (those working on WPA, NYA, CCC and other emergency work). *See Final Report on Total and Partial Unemployment*, 1937, Vol. II, p. 233.

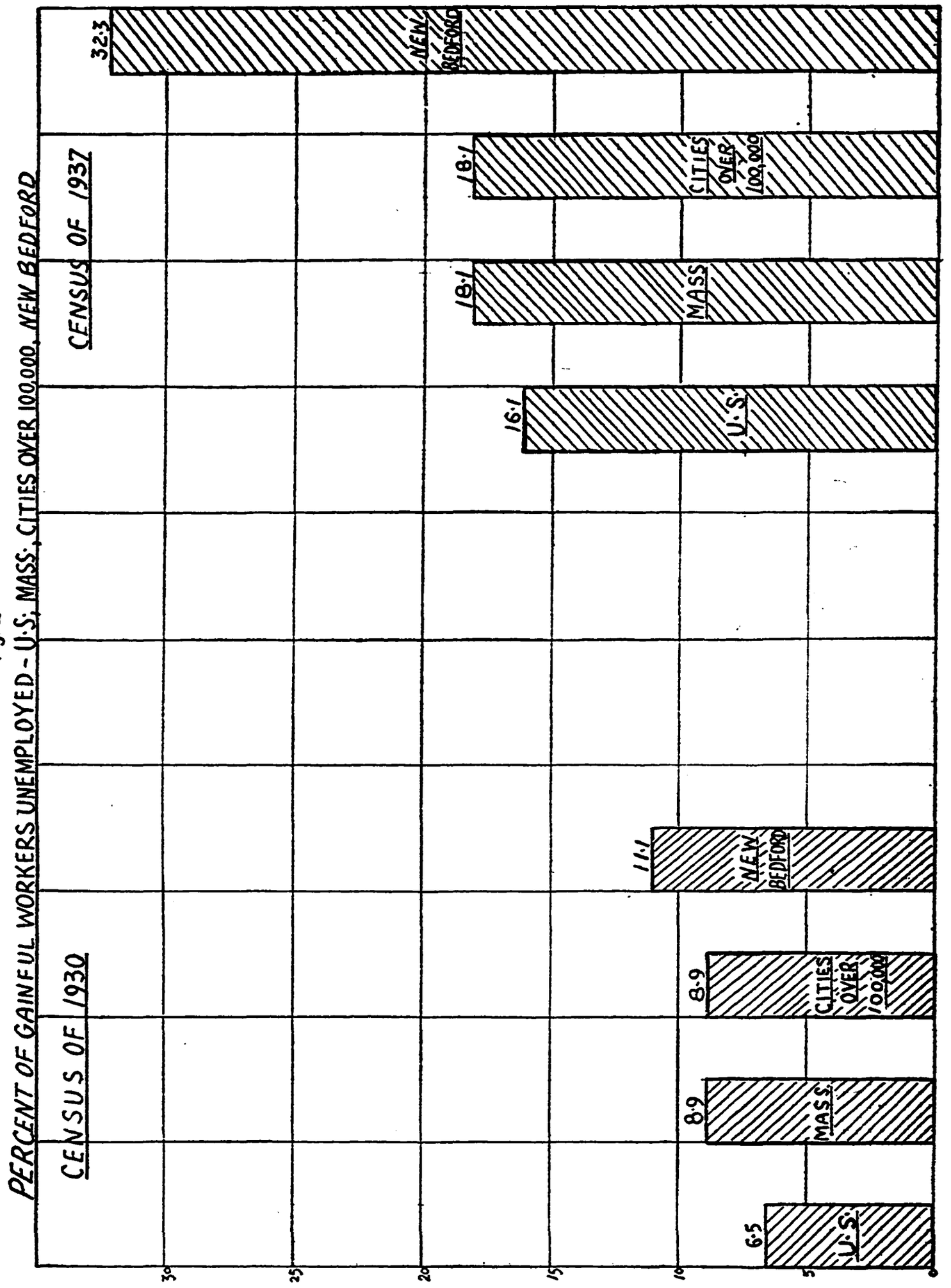

PERCENT OF GAINFUL WORKERS UNEMPLOYED - U.S., MASS., CITIES OVER 100,000, NEW BEDFORD
CENSUS OF 1930
CENSUS OF 1937
6·5
U.S.
8·9
MASS.
8·9
CITIES OVER 100,000
11·1
NEW BEDFORD
16·1
U.S.
18·1
MASS
18·1
CITIES OVER 100,000
32·3
NEW BEDFORD
0
5
10
15
20
25
30

Fig. 2

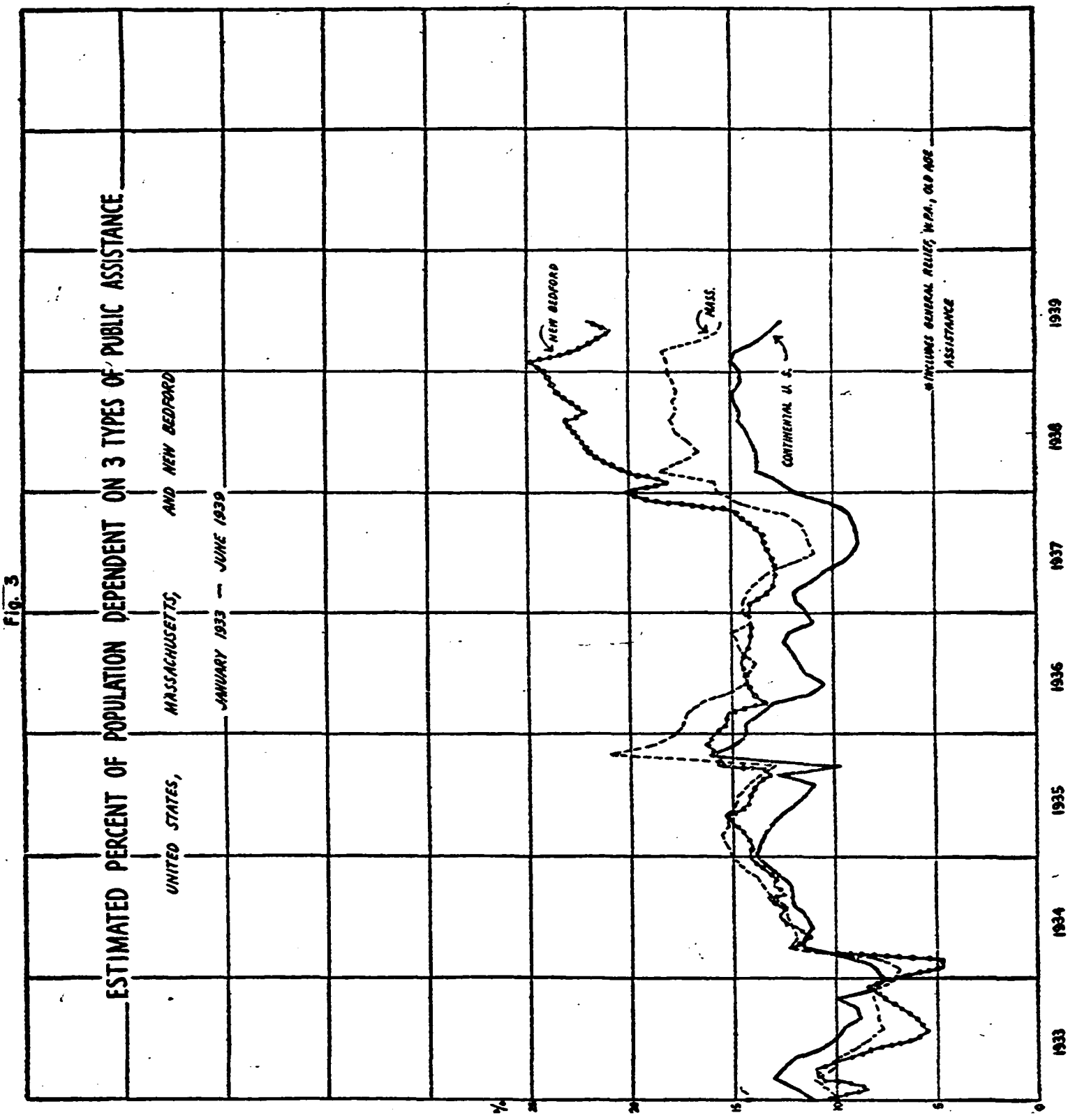


Fig. 3
ESTIMATED PERCENT OF POPULATION DEPENDENT ON 3 TYPES OF PUBLIC ASSISTANCE
UNITED STATES, MASSACHUSETTS, AND NEW BEDFORD
JANUARY 1933 — JUNE 1939
NEW BEDFORD
MASS.
CONTINENTAL U. S.
*INCLUDES GENERAL RELIEF, W.P.A., OLD AGE ASSISTANCE
%
25
20
15
10
5
0
1933
1934
1935
1936
1937
1938
1939

These figures are sufficient to show how large this city's unemployment was. A much more detailed description of employment and unemployment with particular reference to such factors as age, sex and race, occupation and industry, duration of unemployment and family unemployment, based on a census taken in the spring of 1939 will be presented in the next chapter.

Relief

Another feature of the depression in cotton textiles has been the heavy relief load which the severe unemployment of New Bedford caused. The steady rise in the percent of the total population dependent upon three types of public assistance (general relief, old age assistance and WPA) is shown in Fig. 3.

With large numbers of cotton textile workers thrown out of work even before 1929 a public assistance program became an urgent necessity very early in the 1930's. On a comparative basis New Bedford lagged behind the State of Massachusetts and the country as a whole at the outset. By the early months of 1934, however, the city's relief rate equalled that of both the State and the United States. Since then the New Bedford rate has been higher than that of the whole country and since the summer of 1937 the gap between the relief rate in New Bedford and the others has been growing wider. By February 1939 approximately one-fourth of the entire population in New Bedford was dependent on the three types of public assistance programs.

The city of New Bedford, Massachusetts has thus run the gamut characteristic of all depressed areas. Heavily dependent on one industry upon which it concentrated most of its energies, it prospered as cotton textiles prospered and it suffered from that industry's movement to the South.

CHAPTER II

UNEMPLOYMENT IN NEW BEDFORD, MASSACHUSETTS

A HIGH incidence of unemployment is an outstanding characteristic of depressed areas, no matter what their economic history, geographical location or prevailing industry may be. It is the kind of unemployment that strikes with full force, with little regard for sex, age, skill, nationality or occupational and industrial group. It breaks down the economic and social security of both the individual and the family. Unemployment is not only high but also of long duration, and as the weeks of unemployment stretch into months and the months into years, the unemployed exhaust their reserves and are forced to fall back on public assistance as their final line of defense against starvation.

The economic activities of a depressed area do not, of course, come to a complete standstill. People still buy and sell and a considerable number of persons remain employed. But an examination of their conditions of employment clearly indicates that they are working in a depressed area. Competition for jobs is intense and, in a situation where the supply of labor is much greater than the demand, earnings follow a downward course. Temporary layoffs are frequent in number and very few workers can show a record of uninterrupted employment. Underemployment prevails and a large number of the employed do not work a full week.

In order to provide a detailed description of the conditions of employment and unemployment in New Bedford, the Division of Research of the WPA conducted a Survey of Employment and Unemployment in that city as of the first week in May 1939.[1] The results of that Survey, presented below, provide

1 The basic tables from the survey will be found in Appendix C.

the factual basis for the general framework that has just been described.

THE UNEMPLOYED

The most important fact concerning unemployment in New Bedford can be stated at the start: Almost 30 out of every 100 workers in that city were unemployed during the first week in May 1939.[2]

Behind this overall unemployment rate lie a number of significant variations as to age, sex, nationality and industrial group, all of them arising from New Bedford's peculiar economic and industrial history.

SEX

Thus, the proportion of women in the labor market in New Bedford is very high because the city's prevailing economic activity, cotton textiles, is an industry which has characteristically been a large employer of women. As far back as 1920 the United States Census showed, that with the exception of Washington, D. C., New Bedford had the highest proportion of female gainful workers of any city in the United States of 100,000 population or over. The WPA labor market survey showed that more than one-third (36 percent) of all the women and girls in New Bedford were in the labor market.

In this connection, it is interesting to note that women in New Bedford had a higher rate of unemployment than men. While 27 percent of all the male workers in New Bedford were unemployed, 32 percent of the female workers were without employment. In other words, although women came into the labor market in large numbers, they found it harder to get jobs than men in New Bedford.

Here, then, is the first indication of the effect of the decline in cotton textiles upon unemployment in New Bedford, for

2 It should be pointed out that throughout this chapter, all data on New Bedford's labor market, unemployment, and employment are as of one point in time—the first week of May, 1939.

most of these women used to find their jobs in that industry. With employment opportunities severely curtailed, however, practically one-third were unable to find any work.

One important qualification of this statement is necessary. During the past several years the city of New Bedford has carried on a vigorous campaign to induce new industries to locate within its boundaries.[3] Although unsuccessful in attracting enough plants to take up the slack in employment left by the collapse of cotton textiles, this campaign has brought a number of garment plants into the city. These plants have followed a policy of hiring quick, young, and easily adaptable girls. The result of this policy is clearly reflected in Table 6. While females over 25 years of age suffered a higher rate of unemployment than men in the same age groups, the case was reversed for those under 25 years of age, boys finding it harder to get jobs than girls.

AGE

A more detailed age breakdown of the unemployed workers in New Bedford (see figure 4) shows that the younger workers (under 21 years of age) and the older workers (55 years of age and over) experienced the highest rate of unemployment.

Even in an area which is not depressed, the younger worker has a hard time finding a job since he lacks work experience. It is doubly hard for him to discover employment opportunities when the principal means of the city's livelihood has collapsed. In the intense competition for whatever work remains he is at a disadvantage.

The older worker is not much better off. In contrast to the younger person, he does not lack work experience, but is handicapped by his age. In the struggle for the comparatively small number of jobs, the older worker also finds himself at a competitive disadvantage.

The tendency for youth and the older worker to have the highest unemployment rates prevails throughout the country.

3 See Chapters 5 and 6.

As the New Bedford data reveal, however, this tendency is heightened to a marked degree in a depressed area.

TABLE 6

UNEMPLOYMENT BY AGE AND SEX, NEW BEDFORD, MASSACHUSETTS, MAY 1939 [a]

Age Groups	Percent of Unemployment	
	Male	Female
Under 25 years	40	36
25–54 years	22	30
55 years and over	34	40

[a] All tables in this chapter are from the Survey of Employment and Unemployment conducted by the Division of Research, Work Projects Administration in May 1939. See Appendix C.

The high incidence of unemployment in New Bedford is attested again by the fact that even in the age group with the best showing (30 to 34 years of age) one out of every five workers was unemployed. (Figure 4.)

INDUSTRY

Workers attached to the cotton textile industry suffered the greatest amount of unemployment. No matter on what basis this group is compared with the rest of the workers in New Bedford, it comes out a poor second. In Table 7, for example, workers whose last full-time job was in the cotton textile industry show a uniformly higher unemployment rate than other workers.

This rate is 8 percentage points higher for the cotton textile group, both male and female. In Table 8, another comparison is made, this time on the basis of age. With the exception of the youngest group, workers whose last full-time job was in cotton textiles had a higher rate of unemployment than other workers. The difference becomes more and more marked as the older age groups are reached.

FIG. 4

UNEMPLOYMENT BY AGE

NEW BEDFORD MAY 1939

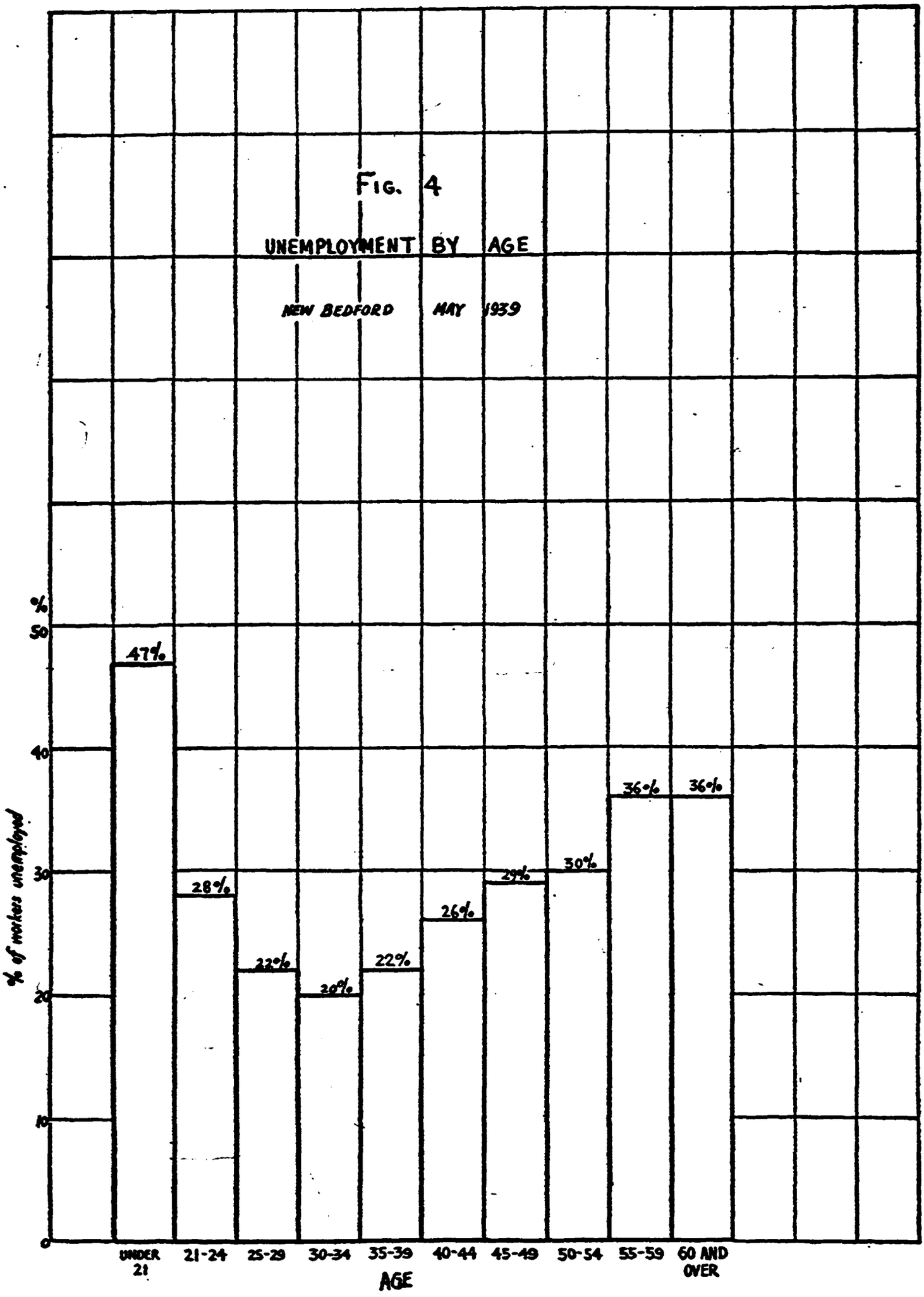


TABLE 7

UNEMPLOYMENT BY INDUSTRY, BY SEX, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Industry of last full-time job and sex	Percent of workers unemployed
All available workers	29
Male	27
Female	32
Workers whose last full-time job was in textiles	36
Male	34
Female	39
Workers whose last full-time job was not in textiles	25
Male	24
Female	28

TABLE 8

UNEMPLOYMENT BY INDUSTRY, BY AGE, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Age	Percent of workers unemployed	
	All workers	Workers whose last full-time job was in cotton textiles
Total	29	37
Under 21 years	59	46
21–24 years	28	32
25–34 years	21	26
35–44 years	24	35
45–54 years	30	42
55 years and over	35	52

COLOR AND NATIVITY

The unemployment rate among New Bedford workers also varied widely by color and nativity. Four groups in the city's working population can be distinguished in this respect. They include the native-born whites; the foreign-born whites who came into New Bedford cotton textile mills largely during the last part of the nineteenth century and the first part of the present century; the Negroes who are comparatively large in

number for a New England city and who owe their presence to the anti-slavery feeling that prevailed in New Bedford in the pre-Civil War days; and finally, the "other" group which comprises the Portuguese who have been present in New Bedford since its former days of maritime greatness.

Figure 5 shows that while there was not much difference in the rate of unemployment between the native-born and foreign-born whites, a marked difference did exist when these two groups were compared with the Negroes and Portuguese. The last named (Portuguese) were particularly unfortunate in this respect, for practically one out of every two of their workers was unemployed.

The most important reason that may be assigned for these differences in unemployment lies in the matter of occupational class. While only about one-tenth of the workers who were native or foreign-born white were in the unskilled class (see Table 9), about one-half of the Negro and "other" groups were unskilled. In other words, the Negroes and Portuguese were engaged primarily in the occupations which show the highest rates of unemployment. The Portuguese were the most disadvantaged group, for fully 91 per cent of their workers were found in the semiskilled and unskilled occupations.

TABLE 9

SOCIO-ECONOMIC GROUPS OF USUAL OCCUPATION BY COLOR AND NATIVITY, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Socio-economic groups of usual occupation	Color and nativity				Unemployment rate of workers in each socio-economic group
	Native white	Foreign-born white	Negro	Other	
Total	100%	100%	100%	100%	24.6
Proprietors	6	8	5	4	9.7
Professional	6	1	5	—	10.0
Clerks	19	6	9	3	14.2
Skilled	12	15	11	2	21.2
Semiskilled	47	58	21	41	29.6
Unskilled	10	12	49	50	33.5

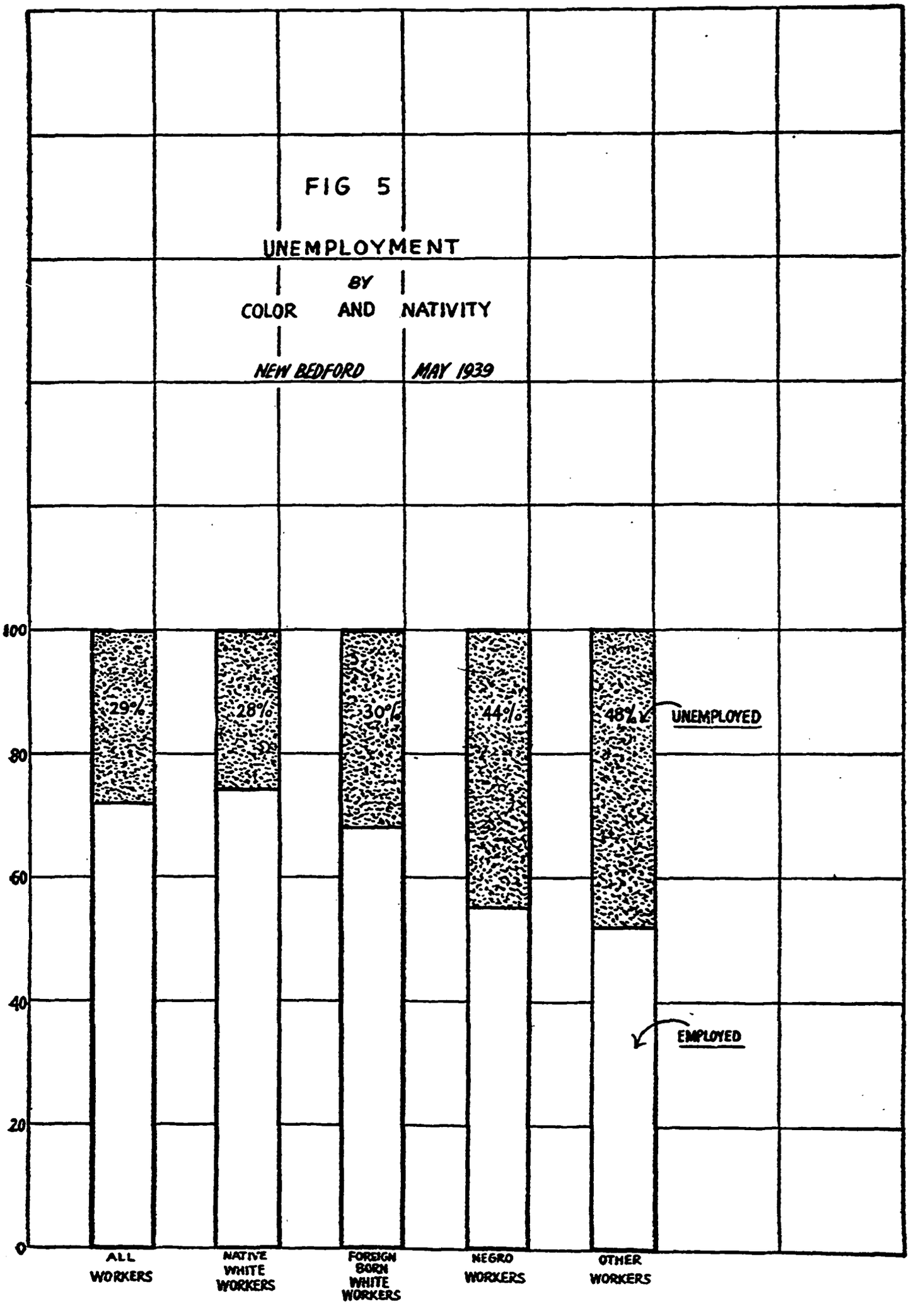


FIG 5
UNEMPLOYMENT
BY
COLOR AND NATIVITY
NEW BEDFORD MAY 1939
100
80
60
40
20
0
29%
28%
30%
44%
48%
UNEMPLOYED
EMPLOYED
ALL WORKERS
NATIVE WHITE WORKERS
FOREIGN BORN WHITE WORKERS
NEGRO WORKERS
OTHER WORKERS

A closer examination of New Bedford's overall unemployment rate indicates therefore that certain groups in its population, such as females over 25 years of age, youth and older workers, workers in certain occupational groups, and the Negroes and Portuguese were particularly hard hit.

The Duration of Unemployment

When unemployment strikes, most persons or families have some cash reserve with which to cushion the first effects of joblessness. Most of these cash reserves, however, are small. Within a short period it becomes necessary to borrow money from friends or relatives, or perhaps make a loan on the basis of an insurance policy. Some of the furniture is sold, residence is changed to a poorer section of the city. It becomes exceedingly difficult even to compete for a job, for clothing takes on a well-worn look and even the cost of transportation to a place where work may be available is difficult to obtain.

To the broad and fundamental features of unemployment in the city of New Bedford which have been presented above there must now be added the vital question as to how long these unemployed have been without a job.[4] The incidence of unemployment has already been noted. Now the question concerns its intensity.

The decline in cotton textiles had been going on for more than a decade by May, 1939 and employment opportunities in other auxiliary industries had also been meager throughout most of that period. Every time a cotton textile mill closed down it threw hundreds of workers out of a job. Since these mills collapsed one after the other during the 'thirties, the pool of unemployment rose steadily. Purchases by the ever-expanding jobless group necessarily had to be curtailed. This in turn had a deleterious effect upon the enterprises in the city which had provided the workers in the prevailing industry with their needs.

4 In this study the duration of unemployment is measured in terms of months since a person had a private job lasting at least two weeks with 30 or more hours of employment each week.

They, too, found it necessary to dismiss employees. The familiar downward spiral wherein unemployment breeds unemployment began to operate. In the light of these facts a long duration of unemployment was to be expected.

The broad figures on duration of unemployment in New Bedford are as follows:

The average[5] duration of unemployment for all unemployed workers was	14.4 months
The average duration of unemployment for unemployed workers whose last full time job was in cotton textiles was	18.1 months

These average figures, however, hide some significant variations in the duration of unemployment. It is important, for example, to know what proportion of the unemployed workers are "long unemployed," i. e., have been without a job for one year or more. Table 10 shows that more than *one-half* of all the unemployed workers in New Bedford were long-unemployed. The almost complete lack of re-employment opportunities in what was once the principal means of livelihood for a majority of the city's working population is also shown by the fact that fully *two-thirds* of all the unemployed workers whose last full-time job was in cotton textiles were long-unemployed.

TABLE 10

DURATION OF UNEMPLOYMENT, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Duration of unemployment	Percent of unemployed workers	
	Total	Last full-time job in cotton textiles
1 year or more	55	65
2 years or more	28	29
3 years or more	19	19

5 In all cases the average used is the median.

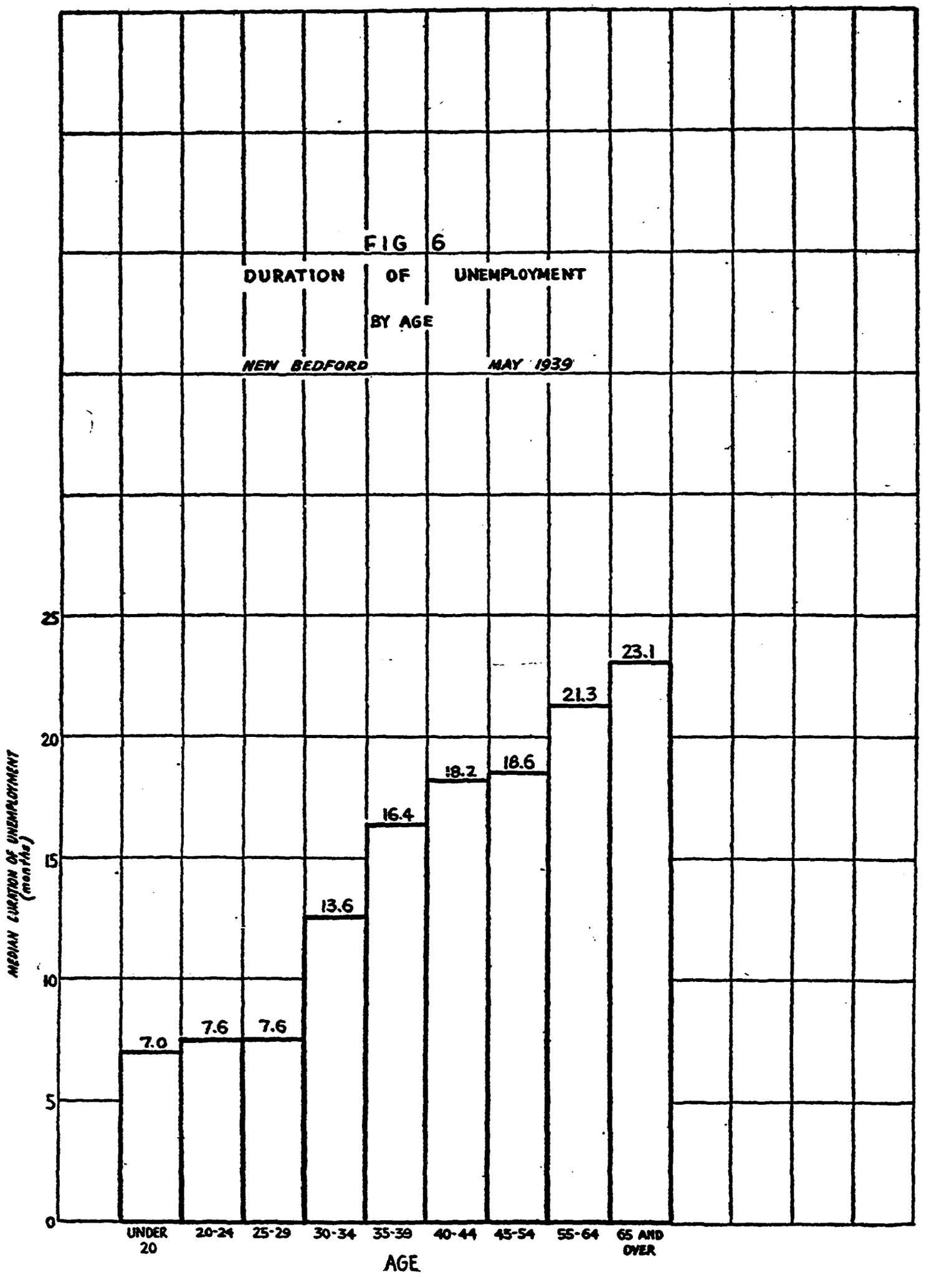


FIG 6
DURATION OF UNEMPLOYMENT
BY AGE
NEW BEDFORD MAY 1939
MEDIAN DURATION OF UNEMPLOYMENT (months)
0
5
10
15
20
25
7.0
7.6
7.6
13.6
16.4
18.2
18.6
21.3
23.1
UNDER 20
20-24
25-29
30-34
35-39
40-44
45-54
55-64
65 AND OVER
AGE

There was another group of unemployed workers who suffered a lengthy period of unemployment, i. e., the older man or woman. In fact, as Fig. 6 shows, there was a significant and direct relationship between age and duration of unemployment. For example, unemployed workers who were 55 years of age or over at the time of the survey, had been without a job three times as long as those who were under 30 years of age. The older the worker, the higher was the duration of his unemployment. In both incidence and intensity of unemployment, therefore, the older workers formed a clearly disadvantaged group.

The ability of the unemployed to maintain decent standards of life depends to a large extent on the size and adequacy of the reserves they were able to build up while they had a job. These reserves, in turn, are related to the length of time the workers were employed. Obviously enough, no man can save very much if his job lasts for only a few months. And this, unfortunately, was the case for the unemployed New Bedford workers. The average duration of the unemployed workers' last full-time job was only a little over five months.[6] Significant variations are also found when this average is broken down:

One out of every five unemployed worker's last full-time job lasted 1 month or less

One out of every three unemployed worker's last full-time job lasted 3 months or less

One out of every two unemployed worker's last full-time job lasted 6 months or less

The Three Unemployed Groups

The unemployed in New Bedford can be classified into a variety of groups based on age, sex, color and nativity and industry. By doing so significant facts concerning unemployment can be disclosed. In addition to those already mentioned, the unemployed fall into three distinct classes which have an important bearing upon their status in the labor market. In

6 The average (median) was 5-2 months.

New Bedford the unemployed were distributed among the three groups as follows:

19 percent of the unemployed were working on some project in connection with the Federal Works Program

58 percent of the unemployed had no work of any kind and were actively seeking work

23 percent of the unemployed were temporarily inactive

EMPLOYED ON FEDERAL EMERGENCY WORK PROGRAMS

About one out of every five unemployed workers in New Bedford was working on one of the Federal Emergency Work Programs. These include the WPA, CCC, and NYA in the following proportions:

78 percent were in the WPA (Work Projects Administration)
14 percent were in the CCC (Civilian Conservation Corps)
8 percent were in the NYA (National Youth Administration)

The unemployed on the WPA were older than other unemployed workers. The median age of the former was 42.8 years; the median age of the latter was 32.8 years. The most important reason for this age difference lies in the fact that most WPA workers were heads of families.[7]

The WPA worker also had a long duration of unemployment. At the time of the Survey (May, 1939), more than two-fifths of them had been without a full-time private job for 3 years or more. This is not surprising, however, in view of the fact that a person could obtain a WPA job only after a considerable period of unemployment had left him without any available means of support.

THE UNEMPLOYED NOT ON EMERGENCY WORK PROGRAMS

The majority of the unemployed (58 percent), however, did not have emergency employment and were actively seeking work. This group of unemployed was distinguished by the large

7 Eighty-two percent of the persons on the WPA in New Bedford were heads of families.

proportion of young people it contained, for the labor market of every city is continuously being swelled by youth seeking their first jobs. More than one-third of the unemployed not on emergency programs were under 25 years of age. (Table 11.)

The two groups of unemployed which have already been discussed formed the active part of the New Bedford labor market. There was another group of persons who were temporarily inactive, i. e., were neither working nor seeking work at the time of the survey for one reason or another. These reasons and the proportion in the group giving them as a cause for their inactivity is as follows:

Total	100%
Temporarily disabled	36
Believed no work available	34
On temporary lay-off	21
Awaiting results of a job application	5
Other reason	4

In every city in which the Division of Research, Work Projects Administration, has conducted a survey of employment and unemployment the leading reason for inactivity has been temporary illness or disability.[8] In New Bedford more than one-third of all the inactive workers fell into this group.

Another important reason for inactivity, ("believed no work available") is particularly applicable to a depressed area. The unemployed cotton textile worker knew which of the remaining mills were working. He knew how many shifts the mills were running and the kind of men they wanted. He had been down to apply for a job a number of times and the point was reached where he knew that further search for the time being was useless. It would not only be useless to look but would also involve an expenditure of money for transportation which he could ill afford. Therefore, when asked their reasons for not looking for work during the week of the survey, many workers gave the obvious answer—that there was no work available.

8 See Webb, John N. and Bevis, Joseph C., *Facts About Unemployment*, Work Projects Administration, Social Problems No. 4, 1940, page 17.

One-third of the New Bedford inactive workers gave as their reason for not seeking work the fact that they believed no work was available. In the seven depressed coal towns in southern Illinois, fully 44 percent of the inactive workers gave the same reason. In the more "normal" cities like Birmingham, Alabama and San Francisco, California the percent of inactive workers who gave this reason was only 13 percent and 12 percent, respectively.

TABLE 11

PERCENT IN THE THREE UNEMPLOYED GROUPS WHO WERE UNDER 25 YEARS OF AGE, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Unemployed group	Percent under 25 years of age
Total unemployed	25
Seeking work	37
On the Works Program	29
Inactive	23

The remainder of the reasons are more or less self-explanatory. In every city there is a substantial number of workers who are temporarily inactive because of the seasonal nature of their employment, bad weather conditions which preclude working, etc. There are, in addition, those who have applied for a job and are awaiting the results, and persons on strike or on lockout or vacation. All of them are only temporarily inactive, and expect either to return to work or to resume an active search for work in the near future.

FAMILY UNEMPLOYMENT

One out of every four families in New Bedford was totally unemployed, i. e., had no member who was working. Thus, the rate of unemployment among families was almost as high as it was among individuals.

The employment status of these families, however, varied significantly with the number of workers in the family. As Table

12 shows, there was an inverse relationship between the number of workers in these families and the proportion unemployed. The more workers a family had the smaller was the rate of its unemployment.

Two-thirds of all the unemployed families in New Bedford were long unemployed, i. e., had no member working for one year or more.[9] When broken down by number of workers per family, the distribution was as follows:

Fifty-eight percent of the unemployed families with one worker were long unemployed.

Thirty-nine percent of the unemployed families with two or more workers were long unemployed.

The families of New Bedford were characterized by their comparatively large number of workers. Fully 50 percent of all families in the city had more than one worker; two-thirds of the families with a member in cotton textiles had more than one worker.

TABLE 12

FAMILY UNEMPLOYMENT, BY NUMBER OF WORKERS IN FAMILY, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Number of workers in family	Percent of families who had no member employed
All families[a]	26
One-worker families	25
Two-worker families	11
Three-worker families	9
Four or more worker families	4

[a] Includes families with no workers.

The large number of married women in the labor force were responsible for the greater worker resources of New Bedford families. The influence of the city's prevailing activity is ap-

9 The intensity of family unemployment is further indicated by the fact that more than one out of very four unemployed families had no member working for five years or more.

parent, for fully one-half of the married women in New Bedford who were working had a job in the cotton textile industry.

A married woman is usually considered to be working because her husband is out of the labor market entirely, e. g., because he is permanently disabled, or unemployed. This was not the case in New Bedford. As Table 13 shows, more than four-fifths of the married women who were working in New Bedford had husbands who were also working.

Married women in New Bedford, therefore, were not working because their husbands were unable to find jobs. They were working in order to raise their family income, and they were able to do so because the city's predominant industry is oriented to female labor.

THE RELATION BETWEEN PRIMARY AND SECONDARY WORKERS

Perhaps one of the most important factors concerning the employment status of families involves the relationship between the employment status of the primary and secondary worker. In most families the primary worker is the man of the house—the main breadwinner of the family. Secondary workers include such persons as the wife who is also in the labor market, the son or daughter who has completed school or has been taken out of school to attempt to secure a job in order to supplement the family's income.

TABLE 13

EMPLOYMENT STATUS OF HUSBANDS OF MARRIED WOMEN WORKING IN NEW BEDFORD, MASSACHUSETTS, MAY 1939

Employment status of husband	All married women	Married women working in textiles	Married women not working in textiles
Total	100.0%	100.0%	100.0%
Husband employed	82.5	80.4	84.5
Husband unemployed	15.1	17.3	13.0
Husband a nonworker	2.4	2.3	2.5

The relationship between the employment status of primary and secondary workers suggests an explanation for the high rate of family unemployment in New Bedford. An analysis of the New Bedford data discloses that in families in which the primary worker was employed, the secondary worker was, in most cases, also employed. Where the primary worker was unemployed, however, there was a marked tendency for the secondary worker also to be unemployed.

As it is indicated in Table 14, these tendencies were present not only in families having a single secondary worker but even in those families having as many as two or three secondary workers. Where the primary worker was employed more than two-thirds of the secondary workers were also employed; where the primary worker was unemployed, practically half of the secondary workers were also unemployed.

As a rule, then, secondary workers in unemployed families in New Bedford found it difficult to ameliorate their families' plight.

An analysis of unemployment data in New Bedford therefore shows that it meets the outstanding characteristic of depressed areas, i. e., a high incidence and a long duration of unemployment.

TABLE 14

RELATIONSHIP BETWEEN EMPLOYMENT STATUS OF PRIMARY AND SECONDARY WORKERS, BY NUMBER OF WORKERS IN FAMILY, NEW BEDFORD, MASSACHUSETTS, MAY 1939

Number of secondary workers in famly	Primary worker employed		Primary worker unemployed	
	Percent of secondary workers who were employed	Percent of secondary workers who were unemployed	Percent of secondary workers who were employed	Percent of secondary workers who were unemployed
One secondary worker....	74	26	54	46
Two secondary workers...	68	32	52	48
Three secondary workers .	68	32	54	46

PART TWO

THE CAUSES

CHAPTER III

THE FACTORS IN THE SHIFT TO THE SOUTH

"Here the cotton grows up to the doorsteps of your mills, and supply and demand clasp hands."

A Southerner at the Atlanta Exposition of 1881.

THE migration of an industry from one area to another, is often caused by some isolated or fortuitous circumstance (such as the discovery of a new mineral field). It has usually resulted from the spread of the Industrial Revolution with its machine technique and factory system from the more highly industrialized regions to less fully developed agricultural areas.

Interestingly enough, the spearhead of industrialization has usually been the manufacture of cotton textiles. The relatively slight skill required to produce the coarse grade of goods and the fact that operations can be carried on efficiently in small plants with limited capital requirements has made entrance into the industry comparatively easy. It is for this reason that cotton textiles has proved to be the opening wedge in the transition to industrialism in such places as the southern part of the United States, and other areas which have or are near plentiful supplies of the raw material (cotton) and cheap labor. The point is made by the International Labour Office's Report in the following manner:

> . . . cotton manufacturing seems to be peculiarly appropriate as a first step for countries seeking to incorporate modern industrial technology into economic systems still predominantly agricultural. The techniques of production are relatively simple, standardized and stable; in the weaving section at least, the capital requirements are fairly moderate.[1]

One would imagine that the Industrial Revolution should have been carried through at an earlier period in the South, since the section possessed great natural resources, plenty of

1 *Op. cit.*, Vol. I, p. 112.

water power and above all was the center of the cultivation of cotton. The main reason for the postponement of this development was that the South had in cotton an excellent cash crop which was in great demand for export to England. The South sent its cotton to England and received in return the manufactured articles it needed. This was much more profitable for the South than the manufacture of cotton textiles and diverted the energies and capital of the region from the cotton mill to the cotton field, from industry to agriculture.

The economy of the New England area was the opposite of that in the South. Lacking a reliable cash crop which it could use to exchange for what it needed, the North soon developed its own manufacturing and a profitable carrying trade which sold its goods to the South and the West Indies. With an adequate labor supply, an abundance of water power and high natural humidity, conditions were very favorable for the emergence of cotton textile manufacturing in the North.

The result was that the New England region obtained a virtual monopoly of the fast-growing cotton manufacturing industry. By 1840, seventy percent of the active spindles in the country were concentrated in that area. This growth continued through the Civil War and the period of reconstruction and as late as 1880 more than 80 percent of the active spindles were to be found in New England.

The year 1880, however, marked the end of the North's supremacy in this field. In the little more than a half century since the cotton textile industry of the South has grown until it now accounts for almost as high a proportion of the active spindles (74 percent in 1939) as the North did in 1880. As Table 15 shows, the South first captured the market for the coarser grade of goods (1900), surpassed the North in the medium grade by 1914 and even became the leader in the production of fine yarns by 1931.

The rapid advance made by the South is again illustrated (Table 16) by the fact that it has an overwhelming leadership in the production of practically every type of cloth put out by

the cotton textile industry. More than 90 percent of the staples that form the backbone of the industry are made in the South. It is only in the field of the very fine goods such as voiles, draperies, and lawns that the New England area still maintains its leadership. These goods not only represent a very small fraction of the total market but are also facing a diminishing demand. The production of voiles, for example, decreased 75 percent in the twelve years from 1923 to 1935.

TABLE 15[a]

REGIONAL PRODUCTION OF COTTON YARN FOR OWN CONSUMPTION AND FOR SALE, BY REGION, BY COUNT, 1890-1935

(In percentages of United States total)

	No. 20 and under (Coarse)			No. 21 to No. 40 (Medium)			No. 41 and above (Fine)		
Year	New England	South	Other	New England	South	Other	New England	South	Other
1890	43	41	16	86	3	11	100	—	—
1900	36	52	12	68	26	6	94	1	5
1909	29	62	9	53	42	5	73	24	3
1914	28	63	9	45	51	4	81	16	3
1919	22	71	7	48	48	4	70	27	3
1927	14	82	4	26	71	3	51	44	5
1929	11	86	3	22	75	3	51	48	1
1931	11	86	3	18	79	3	37	61	2
1935	9	88	3	16	82	2	[b]	61	[b]

[a] U. S. Department of Commerce, Bureau of the Census.
[b] Not given.

TABLE 16[a]

PERCENT OF SPECIFIED KINDS OF CLOTH PRODUCED IN THE SOUTH IN 1933

Kind of Cloth	Percent	Kind of Cloth	Percent
Osnaburgs	98	Shirtings	83
Drills	95	Reps, poplins and broadcloth	78
Denims	95	Tickings	76
Print Cloths	94	Twills and sateens	73
Duck	94	Lawns, nansooks, etc.	26
Sheetings	87	Voiles	24
Ginghams	85	Draperies	13

[a] U. S. Department of Commerce, Bureau of the Census.

The development of the cotton textile industry in the South began with the end of the Civil War and the disruption of the slave labor system. In engaging in the manufacture of cotton textiles, however, the South faced competition from the North which already had a well established industry. In order to win its competitive struggle the South had to be able to offer the cotton manufacturer the chance to make his goods there at a lower cost than in the North. It is the purpose of the following section to analyze a number of cost factors in the industry and to indicate the manner in which lower costs served to draw cotton manufacturing to the South.

Transportation Cost

From the cotton fields the manufacturer obtains his raw material, from the stream, coal field or generating plant located somewhere else he purchases the power and energy that drives his machinery, and to the market which is located in a third place he sends his finished product. Each operation involves overcoming the distance between his mill and the cotton field, the source of his fuel and his market, and each operation means an outlay for transportation cost. It is thus to his best interests to be as near as possible to any or all of these points. A small differential on this account may be enough to tip the scales in his favor as against a competing mill. Should any particular locality enjoy an advantage in this respect, the differential in transportation cost may loom large in the shift of the industry to that area.

PROXIMITY TO THE RAW MATERIAL

One of the most important stimuli responsible for the initiation of cotton textile manufacturing into the South lay in the advantage of being able to locate the mills near the cotton fields. "Bring the mills to the cotton!" was the cry that resounded throughout the South in the period following the Civil War.[2]

2 See the excerpts from contemporary Southern newspapers in Broadus Mitchell's "The Rise of Cotton Mills in the South," Baltimore, Johns Hopkins Press, 1921, *passim.*

What seemed so absurd to these people was the fact that cotton was being sent to such distant points as New England and even Lancashire, to be manufactured into cloth and then sold back to the South for a profit. Why not build your mill close to the raw material, cut your transportation cost and keep the money in your own region?

This was the major argument used by those who sought to foster the growth of cotton mills in the South. As a matter of fact, the advantage arising out of being near the cotton fields was not very important and was soon to vanish almost altogether. But to a region which was desperately seeking some economic activity upon which it could depend, this argument carried great weight.

Proximity to the raw material involved other advantages. Unlike the northern mills which found it necessary to stock up on cotton during the picking season, the southern mills could rely upon a reserve of cotton in the hands of the farmers. In fact, some of the smaller mills might wait until they actually received orders for yarn or cloth before they bought any cotton. This, of course, partially eliminated the risk from fluctuations in the price of cotton.

There can be no doubt that at the beginning of the period which witnessed the rise of cotton manufacturing in that region southern mills located near the cotton fields enjoyed distinct advantages. These advantages, however, continued only as long as these mills were few in number and concentrated on the manufacture of the coarser grades of goods. As the number of mills multiplied it was inevitable that the local supply of cotton would become inadequate to satisfy the greatly increased demand. Sometimes, in fact, the local price would be above that of spot cotton in New York. In addition, as the mills turned to the manufacture of finer grades of goods a better quality cotton than that available locally had to be obtained. Long staple cotton from which the better quality product is spun is not grown near the manufacturing regions. At present about

three-fourths of the cotton used in the Carolinas (the most important cotton textile center in the South) has to be transported from regions west of the Mississippi River which also supplies the New England area with most of its cotton.[3]

It is exceedingly difficult to arrive at an exact measurement of the differential in transportation cost on cotton between the North and South. Different mills obtain different grades of cotton from different sections of the country by different means (by rail, by water, or a combination of both). In general, there are two points of agreement on the subject. First, for the mills which must go outside of local sources for their cotton the differential in favor of the South amounts to about one-half cent per pound of cotton. Second, such an advantage is negligible in its effects, especially since the savings amount to only two or three per cent of the value of the finished product:

> Economy in freight on raw cotton, therefore, is realized only by mills in the more southern part of the manufacturing district, and probably a majority of the spinners pay nearly as much as the New England spinners for their raw materials.[4]

In addition, the city of New Bedford is in a more advantageous position than other areas of cotton textile manufacturing in New England. Together with neighboring cities as Fall River and Providence, New Bedford lies on a body of water which enables it to receive its cotton by means of ship or a combination of railroad and ship, the freight charges on which are cheaper than those of an all-rail route.

It is evident, then, that proximity to the raw material, while important in starting cotton textile manufacturing in the South, soon lost its effect and cannot be considered the principal cause of the decline of the New England and New Bedford areas.

3 *The New England Cotton Textile Industry* by J. H. Burgy, Baltimore, Md., 1932, p. 121.

4 *Cotton Manufacturing Industry of the U. S.*, Harvard, U. Press, Cambridge, Mass. by M. T. Copeland.

PROXIMITY TO SOURCES OF FUEL AND POWER

The cotton textile industry has gone through three stages of development with respect to its sources of power and fuel. In the first stage, the mills sought the stream and the river which had a plentiful supply of waterfalls whose power would drive their machinery. In New England the first cotton mills located along the Blackstone and Merrimac Rivers, while early South Carolina mills found sites along the Chattahoochee and Savannah Rivers.

Water power could not long remain an important factor. Its supply was limited and could not support a growing industry. Steam became the motive power used to operate the machines and coal became the important source of fuel. In this respect the South has had a distinct advantage over the New England area because it is located close to the important coal fields of West Virginia and Kentucky. The advantage of proximity to the coal fields can be gauged from the fact that the cost of transportation makes up half of the total price of coal to the consumer. Burgy quotes the transportation cost per ton of coal to New Bedford at $4.07. The same cost on coal from the southern fields to Charlotte, N. C., is $3.10 per ton, to Spartanburg, S. C., $2.71 per ton.[5]

Here again, however, New Bedford is in a more favorable position in comparison with other New England cities which are located in the interior and cannot take advantage of the cheaper rail-water rates on coal. In comparison with the transportation cost per ton of coal from the southern coal fields to New Bedford of $4.07, the cost to Lowell is $5.37 and $5.52 to Manchester.[6]

The third and most recent development has been the extensive growth of hydro-electric power stations in the South, many of them among the largest in the country. Just as the development of steam power freed the mills from the necessity of locating

5 *Op. cit.*, p. 123.

6 *Ibid.*, p. 115.

near water, so has the growth in the use of electric power with long distance transmission belts allowed even greater freedom of plant location. Since they are now able to purchase this cleaner and more dependable form of energy, the mills need not worry about locating near the coal fields in order to cut down the transportation cost. It comes as no surprise, then, to find that more than half of cotton textile mills in the Southern Appalachian Piedmont purchase this power, while many more buy it in part.[7]

The New England area lacks extensive power sites in the region of greatest spindle activity. While adequate electric power can be generated in such states as Maine and New Hampshire, most of the cotton textile industry is concentrated in the Rhode Island and Massachusetts area. This creates a problem in transmitting the power, further complicated by the necessity of crossing a number of state lines. The result has been that power costs have been slightly higher in the North. Although the differential in favor of the South only amounts to a fraction of a cent per killowatt hour and power costs are a very minor part of the total cost of production, the South does possess a slight advantage in this regard.

PROXIMITY TO MARKET

Whatever differential in the favor of the South exists in the freight charges on raw cotton is counterbalanced by the differential in favor of New England with reference to transporting the finished product.

Two factors bear on this condition. The first is that the South has comparatively few finishing plants. Because of the lack of these facilities it becomes necessary to ship the grey goods to the North (usually New England) to be bleached, dyed and printed. Since most of these finishing plants cluster about the Providence region, the New England area has a definite advantage. As a matter of fact New Bedford has no adequate water supply suitable for finishing purposes. Its proximity to

7 Lemert, Ben F., *Cotton Textile Industry in the Southern Appalachian Piedmont*, University of North Carolina Press, Chapel Hill, 1933, p. 99.

Providence, however, enables it to enjoy the same advantages as other New England cities. On the other hand, about three-fourths of all the goods that have to be finished are sent by the South to the Northern finishing plants.[8]

More recently there has been an increased growth in the number of finishing plants in the South. The fact that the streams in New England are less turbid and relatively more free of calcium, which prevents lather formation, gave the New England area an early advantage as a finishing center. With the increased use of filtering devices and water-softeners, however, the South has been able to overcome this initial superiority and many New England finishing plants have been establishing branches in the South. To date, however the advantage on this count still remains with the New England area.

The second factor is the proximity of the northern mills to the city of New York which is the chief market for cotton textiles. Worth Street in New York abounds in selling offices, brokers, converters, jobbers, etc. A good deal of business is still transacted in Boston and some of the western markets (Chicago, St. Louis) are growing. But New York's financial and commercial supremacy makes the center of the market inevitably gravitate towards it.

This nearness to the New York market has been of especial importance to the New England area, particularly to New Bedford which specializes in the manufacture of fine quality and style goods. Manufacturers in this region are in a much better position to capitalize on the time element in placing their goods on the market at propitious intervals, and frequent communication with the New York center from which new style trends emanate gives them a better sense of the ever changing market demand for this type of product.

It is difficult, in the matter of transportation cost, to add up the credits and debits and strike a balance which would represent a definite differential in favor of any one region. The general statement may be made, however, that while the South

8 J. H. Burgy, *op. cit.*, p. 142.

enjoys a very small differential in relation to the raw material [9] and source of fuel, the propinquity of the northern mills to the market appears as a counter-balancing factor and neutralizes such an advantage.

New Bedford and the rest of the tidewater region was affected even less by rate differentials than the remainder of New England because of its ability to take advantage of the cheaper rail-water routes. Its proximity to the New York market, in view of its dependence upon the manufacture of fine goods, tends to more than counterbalance any other small adverse differential in transportation cost.

Obsolescence

The technical equipment of every industry is constantly exposed to a variety of improvements. These changes in equipment need not be of a revolutionary nature such as will make an industry's entire equipment automatically obsolete. They may be small, as indeed they usually are, but each small improvement makes the machine more efficient and decreases the unit cost of production in the long run. Thus, any mill or locality that can establish its superiority in technical equipment, has obtained an important advantage in the competitive struggle. And any mill or locality which allows its machinery to become obsolete is in a very vulnerable position.

The importance of this factor in the cotton textile industry has been described as follows:

> For most of the staple cotton fabrics the margin between loss and gain is so narrow that obsolete machinery or methods can be tolerated only within narrow limits if the company is to survive. It is almost true to say that for mills making standard fabrics at

9 It may be interjected here that the South's advantage pertains only to a saving on freight charges on cotton and has nothing to do with the price of cotton itself. No region can obtain any special advantage here for the New York price quotation rules the market and is in turn dependent on the world (Liverpool) market.

least, a plant must be reasonably up to date if it is to exist at all as a going concern. As soon as a machine begins to decline appreciably in its efficiency it is either on the way to the scrapheap or to complete overhauling.[10]

Almost from the beginning of the industry in the South, that region has had an advantage in the comparative newness of its technical equipment. Some of the first mills used second-hand machines which had been discarded by the North, but they soon learned that it was more economical, when the necessary funds could be found, to obtain the newest machines. The southern mills, being established at a later date than those in New England, could take advantage of the latest technical progress and install the newest equipment.

In the period 1880 to 1900 the machinery installed in southern mills was for the most part of the latest and most efficient type. Ninety percent of the frame spindles installed in the South in the decade 1890-1900 were new, while only 70 percent of the frame spindles installed in the New England region during the same period were of the most recent type.[11]

In 1894 the Draper Company put upon the market the Draper-Northrop loom, an automatic machine that was one of the most important technical developments since the eighteenth century inventions revolutionized the industry. The innovation that made this loom superior to the others was its weft-changing device. It was now no longer necessary to change the shuttle when the thread in the bobbin became exhausted, for the empty bobbin was automatically expelled and a new one automatically took its place. All this was done so rapidly that the speed of the loom was not retarded.

Unfortunately for the North, these automatic looms were not accepted as readily there as they were in the South. Most of the New England mills considered the change to the new looms too costly and were of the opinion that no valid reason

10 Senate Document No. 126, pp. 114-115.

11 U. S. Census of 1900. *Manufactures*, Table 19, p. 48.

existed for scrapping the older looms which were still in good working order, despite the fact that automatic machinery permitted a greater output within a given period and allowed each operative to tend a larger number of machines. Of the 234,000 looms added to the industry in the New England and Southeastern States in the period 1900-1914, 153,000 or 65 per cent found their way to the southern mills, while only 81,000 or 35 percent were installed in the New England states.[12] That this trend towards automatic looms has also been greater in the South since 1914 is evident from Table 17.

TABLE 17[a]

PERCENTAGE OF LOOMS WHICH ARE AUTOMATIC IN FOUR NEW ENGLAND AND FOUR SOUTHERN STATES, IN SPECIFIED YEARS

Year	Plain Looms		Fancy Looms	
	New England	Southern	New England	Southern
1914	26.4	41.6	7.6	18.2
1919	38.5	71.5	17.0	54.2
1927	56.8	88.0	27.3	66.7
1929	59.1	80.3	32.6	66.6

[a] *Senate Document 126*, p. 116. Includes all looms in 1914, active looms only in other years.

TABLE 18[a]

PERCENT OF SPINDLES THAT WERE RING SPINDLES, BY REGION, FOR SPECIFIED YEARS

Year	New England	South
1890	59	93
1900	65	96
1904	70	97
1909	76	98
1914	82	99
1919	85	99
1927	90	99
1929	91	99

[a] *Senate Document 126*, p. 116.

12 U. S. Census of 1900: *Manufactures; Census of Manufactures*, 1914.

The southern cotton textile industry has also had an advantage in the matter of spinning machinery. The first machines used for spinning cotton were of the so-called "mule" type. As early as 1828 another type of machine was invented—the "ring" spindle. By 1871 the latter machine was perfected for high speed operations and since then has been much superior to the mule type. The main difference between the two lies in the fact that ring spinning allows for continuous operations while mule spinning is of the intermittent type, the spinning and winding of the thread taking place alternately. The ring spindle is not only faster, but it can be operated by less skillful hands, makes a stronger yarn and takes up less space in a mill.

Since this new machine was perfected about the time the industry began to grow in the South, it was only natural that the mills in that region would buy the new machinery. New England mills, however, already had heavy investments in the mule spindles. From the very beginning, as Table 18 shows, the overwhelming majority of spindles in the South were of the ring type, while New England lagged behind in the installation of the superior machine.

In the matter of technical equipment, then, the cotton textile mills in the South have had a distinct advantage over their northern competitors. The factor of obsolescence has been an important one in the decline in the New England region:

> From the point of view of obsolescence, the decline of New England industry as shown by the index of almost any factor, is especially significant as indicating the severity of competition between the northern and southern regions. Degrees of obsolescence which might have been tolerable prior to 1900 could easily prove to be decisive elements against New England when the drift of new and rebuilt mills to the South was well under way. Obsolescence, therefore, appears to have been an important factor in the trouble of the New England cotton textile industries during the past 30 years and has hastened the transfer to the South.[13]

13 *Senate Document*, 126, p. 116.

Despite the fact that the growth of cotton textile manufacturing in New Bedford came later than in the rest of New England and, in fact, paralleled the development in the South, obsolescence of much of its technical equipment later played a considerable part in its decline.

That much of its machinery was old is shown by the data in Table 19. In 1928 (the first year for which such figures are available in a more or less complete form) three-fourths of the mule spindles in use in New Bedford cotton mills were 20 years or over in age. Although the ring spindles and looms were somewhat newer, a large percentage of these were also concentrated in the older age groups.

The part that antiquated machinery played in the decline of New Bedford is very well illustrated by the examples of the Acushnet and Grinnell cotton textile mills of that city. In 1928 not a single ring spindle or loom in use in the Grinnell mill was under 25 years of age. No machines at all in this mill were under 20 years.

TABLE 19[a]

AGE OF MACHINERY IN NEW BEDFORD COTTON MILLS IN 1928

Age (years)	Percent in each age group		
	Mule spindles	Ring spindles	Looms
0–4	—	1.0	13.8
5–9	4.7	6.6	15.0
10–14	2.2	17.4	6.0
15–19	16.8	32.4	24.4
20–24	33.5	20.9	12.4
25–29	19.7	8.0	13.8
30–34	4.2	2.3	1.9
35 and over	18.9	11.4	12.7

[a] Data from material issued by individual cotton textile mills to the city assessor for taxation purposes. Complete figures for all of the mills included will be found in Appendix B.

The condition of the Grinnell mill can be judged from the illuminating report issued in 1928 by the firm of Sanford and Kelley, cotton brokers in New Bedford. It reads in part:

In a general way, it seems as though there were a good many arguments to be advanced why this company should go out of business and return to its stockholders the par value of its shares, which there is reason to expect a competent liquidating committee could accomplish. Much of the machinery is of almost historical value.

This was seen from the fact that the renowned Henry Ford found in the plant some specimens that he thought were of sufficient interest to purchase for his museum. How the officers of this corporation can justify their operation of the plant is difficult to see.

By July 1931 operations at Grinnell were ended.

In August 7, 1928, the directors of the Acushnet Mill found themselves in a dilemma. Costs were high, business was bad and earnings had been poor for some time. Their equipment was old and it was necessary to purchase new machinery. But this would mean a considerable outlay if the plant were to be put in an up-to-date condition. It was for this reason that the directors seriously considered liquidating the business at that time. Decision was postponed for a time, but in November, 1929 the company was liquidated by vote of the stockholders.

The dilemma which the directors of the Acushnet Mill faced is typical of the situation in many other mills in New Bedford and other parts of New England. By the beginning of the 1920's the problem of obsolete equipment had become extremely serious. In the field of the coarser grade of goods and even in the medium fine products, upon which the South was already encroaching, the northern mills found the older machinery a source of high costs. Many of them realized that it was imperative to purchase new equipment. But the industry was already suffering losses. Lack of confidence in the future militated against the expenditure of any sizeable sums on machinery. This in turn, however, assured continued losses in the competitive struggle with the South. As it turned out, by the time many of the mills awoke to the fact that their equipment was obsolete, it was too late.

Taxation

The comparatively high taxes prevailing in the New England area have been a frequent cause of complaint by the cotton textile industry of that region. Since taxes represent as much as 20 percent of fixed overhead costs, the lower tax rates of the South have served to give the cotton manufacturer in that region a substantial advantage in cost over the northern competitor.

The following answer to the New England Council questionnaire on the matter of taxes by a cotton manufacturer operating mills in the North and South is typical of opinion in the industry.

> Local taxes paid in "X" last year were more than three times those paid by one of our Southern mills of approximately the present size of our mill at "X". Our other Southern mill shows up even better, considering the difference in size.[14]

In many instances lower taxes in the South have been the result of attempts on the part of communities to induce the cotton manufacturer to locate his plant within their boundaries. Such inducements in the form of free sites for mill buildings and tax exemption for a number of years (often for as long as a decade) played a big part, especially in the earlier phases of the industry's growth in the South. In addition many of the southern mills located in small communities where the per capita cost of government was very small, some mills in fact setting up business just outside the corporate limits to avoid higher rates of taxation.

Table 20 shows the tax differential as between the North and the South for a number of years for which comparable data are available. The table also shows that taxes in Massachusetts were higher than those in the North as a whole.

It will be noted that the year 1933 witnesses a very large increase in taxes paid by Southern mills. The new processing

14 New England Council: *Summary of Survey of the Current Situation of the New England Cotton Textile Industry*, April 12, 1935, p. 12.

tax was of some importance in accounting for the increase. In addition, it was at about this time that many of the northern localities and states began their attempts to keep their remaining industry by lowering taxes.

TABLE 20[a]

RATIO OF TAXES OTHER THAN INCOME TAXES TO GROSS SALES OF COTTON TEXTILE CORPORATIONS, 1926–1933

Year	Massachusetts	North	South
1926	2.37	2.06	1.18
1927	2.25	1.90	1.47
1928	2.40	1.95	1.37
1929	1.91	1.77	1.29
1930	2.47	2.26	1.75
1931	2.33	2.21	1.98
1932	3.58	3.12	2.33
1933	3.28	2.91	4.33

[a] From Table 61, *Senate Document 126*, pp. 150-151. Includes Federal, State and Local taxes other than income taxes.

The tendency to retain industry by lowering taxes is perhaps best exemplified by the case of New Bedford. Up to 1936 cotton mills in that city paid a tax on their machinery at the same rate as the rest of the personalty in the city. This rate was a comparatively high one, and it had been growing higher since the war. In 1919 the rate was $27.20 per $1,000 worth of machinery. By 1929 it was up to $30.00 per 1,000 and in 1935 the rate stood at $39.20 per $1,000. Beginning with 1936 New Bedford as well as the other Massachusetts cities was forbidden to tax cotton textile machinery. Instead the State levied the tax at the comparatively low rate of $5 per $1,000 worth of machinery.

Such a reduction in the tax costs of the mills have without doubt played an important part in keeping them in the state. It has not, however, nullified the effects of the favorable tax differential which the South possessed in the intervening 50 years.

Labor

The basic cause of the shift of the cotton textile industry from New England to the South has been a differential labor cost in favor of the southern producers.[15] From the inception of the industry to the present day this differential has been the mainstay of the industry in the South. The lower wage rates, the almost complete lack of unionization until very recent times and the absence of any restrictive legislation on the working hours of labor (especially of women) acted powerfully to draw the industry to the southern states. In view of the fact that labor costs average over 50 percent of the value added to textile manufactures, the shift to the South because of this differential is not surprising. Once the barriers against industrialization were broken down in the South it was inevitable that the flight from an industrialized area of high labor costs to the lower wage area should begin.

Wages

Labor conditions in a given area depend in large measure on the extent of industrialization and the degree of centralization or dispersion of industry. In localities with or near large farm populations, the level of agricultural income is also important. Thus, in New England the cotton manufacturer found himself in competition with the wool, shoe and leather, metal working and many other industries for the available labor supply. That area was already industrialized and as the demand for labor increased the price of labor (wages) rose.

15 *Senate Document 126*: "Wage differentials and differences in labor conditions were the major cause of the migration" (p. 115); M. F. Copeland, *op. cit.*: "The cornerstone of the structure (mill building in the South) has been in the supply of cheap and tractable labor" (p. 34); C. Goodrich, *op. cit.*: "The wage differential, more lenient labor legislation, and more effective control of the labor force are by far the most important factors," p. 377; Burgy, *op. cit.*: "The result of numerous studies made by progressive manufacturers, business men, textile engineers and others who are anxious to see New England regain its leadership... all point to certain phases of the labor problem as basic in the present situation" (p. 145).

In the South, where few factories existed at the inception of cotton manufacturing, the mills were able to draw on a huge supply of farm labor, eager to get regular employment and earnings which, though low in comparison with those received in the North, were still greater than the amount that could be earned on the land. Although the South is going through a period of increased industrialization that has broken the one-time complete monopoly of the labor supply by the cotton mills, the trend has not gone far enough to eliminate the difference in this respect between the two regions. The Decennial Census of 1940 showed that the South is still largely agricultural, over 30 percent of the employed being in agriculture as against 13 percent for the remainder of the country.

Wages in the Southern cotton mills are closely related to prosperity in farming. In fact the labor supply tends to vary inversely with the price of raw cotton. The impoverishment of the small farmers after the Civil War, resulting from the great increase in their numbers following the freeing of the slaves and from the fall in cotton prices in the late seventies created a vast reservoir of labor for the mills to draw on. Since then, despite periods of prosperity, agriculture has yielded a comparatively low income and certainly has not been able to compete for labor with industry.

TABLE 21 [a]

AVERAGE YEARLY WAGES PER WAGE EARNER IN SPECIFIED INDUSTRIES

Year	All Mfg.	Cotton	Woolen and Worsted	Silk and Rayon	Iron and Steel	Motor Vehicles	Foundries and Machine Shops
1919	$1,162	$798	$1,008	$ 854	$1,707	$1,483	$1,290
1921	1,181	772	1,007	934	1,394	1,545	1,283
1923	1,254	815	1,146	1,013	1,640	1,685	1,432
1925	1,280	795	1,158	1,077	1,651	1,726	1,486
1927	1,299	815	1,127	1,097	1,658	1,712	1,488
1929	1,315	763	1,117	1,054	1,742	1,621	1,482
1931	1,102	666	984	892	1,286	1,162	1,535
1933	869	570	801	672	936	1,061	1,153
1935	1,023	640	896	758	1,224	1,477	1,166
1937	1,180	740	1,018	791	1,628	1,625	1,423

[a] U. S. Department of Commerce, Bureau of the Census.

TABLE 22[a]

AVERAGE YEARLY WAGES IN COTTON TEXTILES AS A PERCENT OF AVERAGE YEARLY WAGES IN ALL MANUFACTURING

Year	Percent	Year	Percent
1919	69	1929	58
1921	65	1931	60
1923	65	1933	66
1925	62	1935	63
1927	63	1937	63

[a] U. S. Department of Commerce, Bureau of the Census.

TABLE 23[a]

AVERAGE YEARLY WAGES IN COTTON TEXTILE MANUFACTURE BY REGION

Year	Average Yearly Wages				
	United States	Cotton-growing states	New England States	Massachusetts	New Bedford Mass.
1919	$825	$725	$ 905	$ 897	$ 943
1921	797	659	949	908	933
1923	841	692	1,010	1,012	1,073
1925	795	661	960	955	1,016
1927	815	696	1,011	969	1,010
1929	746	661	984	926	964
1931	666	566	849	827	845
1933	570	520	689	685	670
1935	640	600	771	752	765
1937	740	704	872	853	844

[a] U. S. Department of Commerce, Bureau of the Census.

From the start, the cotton textile industry as a whole has been characterized by low wages. In comparison with other manufacturing industries and even with other textiles (Table 21) the average yearly wages in the industry have indeed been low. The large amount of child labor and the universal use of female operatives have kept wages in the industry at a level only two-thirds as high as that for all manufacturing (Table 22). In the year of greatest prosperity (1929) the average yearly wages in the cotton textile industry were not much more than half of those paid by all manufacturing industries.

Yet wages in the South have been even lower than those paid by the cotton textile industry as a whole (Table 23). During the period 1919-1937, the wages paid by the industry in the South have varied from three-fourths to four-fifths of the amount paid in the New England region and in New Bedford, Massachusetts (Table 24).

TABLE 24 [a]

AVERAGE YEARLY WAGES IN COTTON TEXTILES IN COTTON-GROWING STATES AS A PERCENT OF AVERAGE YEARLY WAGES IN COTTON TEXTILES IN NEW ENGLAND STATES AND NEW BEDFORD

Year	Percent		Year	Percent	
	New England	New Bedford		New England	New Bedford
1919	80	80	1929	67	69
1921	69	71	1931	67	67
1923	69	64	1933	75	78
1925	69	65	1935	75	78
1927	69	69	1937	81	83

[a] U. S. Department of Commerce, Bureau of the Census. Data for New Bedford from *Annual Census of Manufacturing*, Massachusetts Department of Labor and Industries.

It is difficult to determine the precise effect of labor cost differentials since New England mills produce a fine quality of goods, and the production of such goods involves higher labor costs than the production of the coarser and medium grades in which the South has specialized. Their effect, though not precisely measurable, has clearly been important. An indication of the importance of the favorable wage differential to the South is given by an examination of what happened when the N.R.A. code became effective for the cotton textile industry. The code narrowed the wage differential by increasing wages in the South relatively more than in the North. In August, 1933, this differential was down to about 16 percent.[16] An examination of active spindle hours for the period in which the code was

16 The preceding month (July, 1933) the differential was 39 percent. See *Monthly Labor Review* for May, 1935.

effective (Table 3) shows that the North improved its position as against the South—a reversal of a long time trend. With the nullification of the code the differentials again increased and the decline in the North was resumed.

Unionization

Organization of the cotton mill operatives has been much more extensive in the North than in the South. This again is due largely to the age of the industry and its greater concentration in urban centers of New England. Until a very recent date only a small proportion of the textile workers in the North were organized into unions and the unions that did exist were mainly organizations of the more highly skilled employees, such as weavers and loom fixers. Non-members often joined with the others in strikes, however, and even where no formal union existed collective action of a spontaneous kind often occurred.

Stronger labor organization involves pressure for increased wages and stoppages of production if strikes occur. Manufacturers generally prefer a locality which is relatively free from such influences. A Massachusetts manufacturer, in response to a questionnaire sent out by the New England Council indicates that preference in the following words:

> New England mills, having been subject to a certain amount of union domination for some time, have been unable to operate under working conditions as favorable to mills as have been the case in the South.[17]

Labor organization in New Bedford, while never strong in formal unionization, has been quite important in the history of the industry. Two conditions militated against the organization of the cotton mill operatives. The first was the number of diverse nationalities and different language groups among the working force. Besides the native born, the workers included Englishmen, French-Canadians and Portuguese. In addition

17 *Op. cit.*, p. 14.

there existed a marked cleavage between the skilled and unskilled employees, the former favoring craft unionism, the latter supporting industrial unionism. This cleavage was further accentuated by the fact that the skilled workers were predominantly English while the Portuguese were concentrated in the unskilled occupations.

Despite these obstacles, collective action on the part of employees has been rather frequent in New Bedford, especially in resisting proposed wage cuts.[18] Such action found its climax in the six-months' strike in 1928. Called as a protest against a ten percent reduction in wages, the strike affected every mill in New Bedford except one and brought out all of the operatives, non-members as well as members of unions, at a time when only about one-fifth of the cotton mill employees were union members.

Such action was practically unknown to the Southern mill employee, who came from the farm and lived in a mill village where his home and the store in which he bought his goods were owned by his employer. Throughout this entire period the South has been able to offer to the cotton textile manufacturer not only a cheaper but also a more docile labor force.

Social Legislation

The stringency of state regulation of labor conditions (wages, hours of work, child and female labor) has had considerable influence on the manufacturer's decision as to where to locate his plant. The absence of restrictions on working hours, and on the labor of women and children have important effects in lowering costs of production.

In this respect the North is again at a disadvantage. An older and more highly developed industrial region, it has made much greater advances in the field of social legislation than has the South. This has been especially true for Massachusetts, which is a leader in this field. A case in point is the restriction on

18 For early manifestations of this fact, see the excerpts from the Rodman Diary in Appendix A.

hours of work of women (Table 25). Together with Connecticut, Massachusetts prohibited women from working more than 48 hours a week, the lowest number in any state. In addition, neither Connecticut nor Massachusetts allows women to work from 10 p. m. to 6 a. m.[19] necessitating the use of the more costly male labor for night shifts.

TABLE 25[a]

HOURS OF LABOR OF WOMEN ESTABLISHED BY LAW, 1935

State	Maximum hours		State	Maximum hours	
	Daily	Weekly		Daily	Weekly
New England States:			Southern States:		
Connecticut	9	48	Alabama	No restrictions	
Maine	9	54	Georgia	10	60
Massachusetts	9	48	North Carolina	11	55
New Hampshire	10¼	54	South Carolina	10	55
Rhode Island	10	54	Tennessee	10½	57
Vermont	10½	56	West Virginia	No restrictions	

[a] *Senate Document 126*, p. 145.

The restriction of night work for women is a distinct handicap since it hampers the use of more than one shift. The saving in unit overhead costs more than balances the slight increase in labor costs when a double or triple shift is used—if the cheaper female labor can be employed. Such costs as rent and taxes are the same whether one or more shifts are used. Since female workers represent a large percentage of the total labor force[20] and are paid from 5 to 15 percent less than male operatives, economies resulting from multi-shift operations are sharply decreased if restrictions are set upon the employment of women.

In the matter of labor costs, then, the South has a distinct competitive advantage. Not only does it offer the cotton textile

19 Up to 1933 no woman could work from 6 p. m. to 6 a. m. in Massachusetts.

20 In 1940, 22 percent of the persons gainfully employed in all manufacturing were female while 38 percent of the gainfully employed in cotton manufacturing were female.

manufacturer a cheaper and more docile labor force, it also allows him a greater measure of freedom in putting it to use. To a state like Massachusetts, with its progressive labor legislation, the problem which such a situation poses is a difficult one to resolve. Repeal or relaxation of legislation regulating hours of work of women or of provisions for licensing mill firemen and engineers, and requiring adequate first aid facilities and workmen's compensation enforced by strict factory inspection rules, would destroy the results of decades of effort to protect the safety and welfare of the employee. To retain all of such legislation placed the manufacturing enterprises within its borders in a disadvantageous competitive position with those of other states. It is natural that the New England manufacturer looks with approval upon national legislation which imposes identical standards upon the several states.

In 1926-27 a survey by the National Electric Light Association and the Metropolitan Life Insurance Company [21] found that the factor of labor costs was the most important consideration to the manufacturer engaged in the textile business, whether he was setting up new local plants or branches or relocating his entire business (Table 26). The conclusion seems

TABLE 26 [a]

ALL TEXTILES ARRANGED IN ORDER OF IMPORTANCE

Reasons For:

Relocating firms	Setting up branches	Setting up new local plants	Entire industrial group
1. Labor	Labor	Labor	Labor
2. Available factory	Transportation	Markets	Markets
3. Transportation	Available factory	Transportation	Available factory
4. Markets	Power	Available factory	Transportation
5. Living conditions	Materials	Power	Power
6. Power	Markets	Materials	Materials
7. Taxes	Financial aid	Living conditions	Living conditions
8. Financial aid	Living conditions	Financial aid	Financial aid

[a] National Electric Light Association: *Industrial Development in the United States and Canada*, 1927.

21 *Industrial Development in the United States and Canada*, National Electric Light Association and the Metropolitan Life Insurance Company, 1927.

inescapable that it is the labor differential in favor of the South which has been the primary force in promoting the shift of the cotton textile industry from New England to the South.

Cost differentials in favor of the South do not need to be large in order to effect a transfer of the industry. When the margin between profit and loss is slight, even a small differential becomes important. Thus, during the World War, the movement of the cotton textile industry to the southern states was halted because of the fact that everyone was making large profits. Under such circumstances a small differential one way or the other did not make much difference. In the 1920's when profit margins (especially in coarse and medium grade goods) became small, these differentials began to loom large in the calculations of the manufacturer. It was in this decade that the South finally surpassed the North in the manufacture of cotton goods. This point is aptly summed up in the following manner:

> It need not be supposed that the disadvantages of New England as compared with the Southern states in producing coarse—and medium—cotton fabrics must be large in absolute terms in order to effect the transfer. The industry being mature and highly competitive for staple products, only a small margin of advantage is required because great shifts in the industry. This is especially true at periods when the market will support an expansion of mill capacity including entirely new mills. A mill must either operate at something near an average cost for staple fabrics or not at all.[22]

Southern Competition and New Bedford's Decline

Although the cost factors which have just been analyzed worked to the disadvantage of New Bedford as well as the rest of New England, it must be pointed out that New Bedford occupied a special position among the northern cotton textile centers which enabled it to meet southern competition until the end of the first World War.

Responsible for New Bedford's special position was the fact that the city did not really begin to concentrate on the manu-

22 Senate Document 126: p. 117.

facture of cotton textiles until 1880.[23] Before 1880 most of the cloth produced by the mills was of coarse or medium fine yarn count, for utility rather than style was the main consideration of the consumer. With the gradual acquisition of skill, aided by improvements in machinery, refinements in cotton textile products began to appear. As the South began to compete in the production of coarse goods the North turned to the manufacture of finer grades of goods. New Bedford thus gained an invaluable advantage by entering the industry when the manufacture of fine style goods was beginning. The New Bedford mills began to specialize in that type of product almost from the start, designing their buildings and purchasing their equipment accordingly.

New Bedford was further aided by her coastal location which, besides affording her the use of cheaper shipping facilities, provided a particularly moist atmosphere. Since static electricity, especially adverse to the manufacture of fine goods, is more easily combatted in a humid climate, the city's location was especially adapted to this type of product.

The South's first victory in its competitive struggle with the North was in the making of coarse goods. Just before the World War it had won supremacy in the market for medium fine goods. Only recently has the South surpassed the North in the production of the finer yarns. By its early concentration on fine style goods New Bedford thus was able to remove itself from the field of competition until comparatively recently. Once competition caught up, the pattern of decline followed the familiar course. First to feel the effects were the yarn mills, many of them engaged in the production of relatively coarse goods; these were closely followed by mills manufacturing tire fabrics. Last of all to fail were the fine goods mills.

That this, broadly speaking, was the pattern of decline is strikingly illustrated by the story of the decline of the industry in New Bedford:

23 Only two successful mills were established in New Bedford before 1880 —the Wamsutta and Potomska Mills.

The period 1909-1919 was one of uninterrupted prosperity for the New Bedford cotton mills, unlike mills in other New England cities which were already feeling the effects of southern competition. In this decade when the number of wage earners employed in other northern mills remained about stationary, New Bedford witnessed an increase in the numbers employed in cotton textile mills from 22,137 to 35,206 or 59 percent. Most of its products were of the finer grade, almost half of New England's fine goods output coming from New Bedford.

During the war years the concentration of government orders for cotton goods (most of which were for coarse goods) in that region, and the production of tire fabrics for the ever-growing automobile demand reduced the quality of New Bedford's goods. The trend towards increased yarn manufacture (as against cloth production) can be seen from the fact that the number of looms (for weaving cloth) increased only 3 percent in the 5 year interval 1915-1919, while the number of spindles increased 23 percent during the same period.

The coarsening of the product and the manufacture of tire fabrics exposed New Bedford to southern competition for practically the first time in its history. By 1922 the yarn mills were feeling the effects of competition from the lower cost areas. Sanford and Kelley, cotton mill brokers dealing in New Bedford mill shares and naturally interested in the prosperity of these mills immediately detected the cause of this new condition and made the comments on it in their review of conditions in the industry for the year 1922:

The reason that New Bedford yarn mills in particular had such a bad 12 months was that these corporations had to compete directly with other New England centers and the South where not only were wages materially lower, but the number of working hours per week was materially longer. The net result of this was that the average yarn mill could not produce its goods at a profit and sell them in the open market in competition with the other textile centers. The cloth mills were comparatively much better off because of the fine quality of goods manufactured in New Bedford, which

in many cases are special in style and do not meet direct competition from other sections of the United States.

This statement not only shows the dependence of southern competition on cheaper labor, but also emphasizes the differentiation between yarn and cloth mills. For even in 1922 the cloth mills were still relatively safe from southern competition since they concentrated on the production of finer goods.

In 1919 the earnings of nine New Bedford yarn mills averaged 40.94 percent of their capital stock. In the same year the earnings of 18 cloth mills averaged 37.61 percent of capital stock. Five years later (1924) when the general depression in the cotton textile industry began the same nine yarn mills showed losses of 7.26 percent of capital stock; while earnings of the same 18 cloth mills averaged 7.22 percent of capital stock.[24] Only three of the yarn mills are still operating in New Bedford. They are the Quisset Company which now manufactures fine cotton yarn, the Kilburn Company and the Nonquitt Company which began to manufacture fine cotton cloth in 1929 instead of only spinning yarn. About one-half of the cloth mills are now also no longer in operation, although they showed much greater staying power and their demise followed that of the yarn mills.

The South also gained command of the manufacture of tire fabrics, as Table 27 clearly shows. With the growing popular-

TABLE 27[a]

PERCENT OF TIRE FABRIC PRODUCED IN THE SOUTH, 1921–1935

Year	Percent	Year	Percent
1921	26	1929	65
1923	38	1931	59
1925	47	1933	64
1927	54	1935	69

[a] U. S. Department of Commerce, Bureau of the Census.

24 Earnings and losses of individual mills gathered from Sanford and Kelley reports, *Poor's, Moody's and Standard Statistics.*

ity of the automobile, the manufacture of tire fabric became very profitable and many New England firms engaged in its production. Unfortunately for them the style in tires changed from the cord to balloon type, permitting the use of a lower quality yarn in the weaving of the tire fabric. This, of course, allowed the southern mills to compete and eventually win the market.

The effect of this competition in New Bedford is illustrated by what happened to the Manomet Mills of that city. Incorporated in 1903, Manomet became a profitable concern and built two additional mills in 1907-08 and 1916. Then, from 1920-1922, Manomet built its fourth mill, for the specific purpose of making tire-cord fabric. It was the largest single spinning unit in the world and one of the best equipped mills to be found anywhere. But by 1927 this mammoth plant was already being liquidated. Manomet # 4 was sold in 1927 to the Firestone Rubber Company; # 3 had already been sold to Nashawena, another New Bedford mill in 1925. Manomet # 1 and # 2 were sold to the Delaware Rayon Company in 1928 and became the New Bedford Rayon Company.

New Bedford was fortunate in having three tire manufacturers who operated tire fabric mills within the city. The Fiske, Firestone, and Goodyear companies began operations in the latter part of the nineteen twenties. While Firestone has fared well, the Fiske Company is now idle and awaiting final liquidation. The Goodyear plant is also closed and its machinery is being moved South.

Mills manufacturing the finer grades were the last to go. It was only in the decade of the thirties when the effects of southern competition began to be felt in products of better quality and the general depression cut into the demand of the more expensive fine goods, that these mills began to falter and fail. It is these cloth mills, too, which have shown the highest survival rate. Today, only two of the eleven companies which engage in cotton textile manufacturing produce only cotton yarn.

The detailed history of the prosperous Beacon Manufacturing Company which New Bedford lost to the South, illustrates

forcibly the importance of southern competition in the decline of New Bedford's cotton textile industry. It also confirms the impression that labor cost was the most influential factor in the movement.

The Beacon Manufacturing Company

Originally incorporated in 1896 with a capital of $60,000, the Beacon Company failed within one year. In 1904, however, it was reorganized by a new management with double its original capital. The company at this time had one mill with 2400 spindles and 60 looms and employed about 200 people. By 1926 the company had built a new mill (1914), a new storehouse (1915) a new weave shed (1917) increased its spindles by 750 percent and its looms by 1,233 percent and employed approximately 1,600 workers.

The basis of the company's remarkable progress was its product—blankets. Beacon blankets have been and are widely known and sold throughout the United States.

Despite its prosperity the company sought to decrease its costs and moved part of its plant and machinery to Swananoa, North Carolina, where blankets of a coarser and plainer kind were manufactured. Said Sanford and Kelley, New Bedford cotton brokers, in their review of the year 1924:

> This is a concrete example of the partial loss of an industry from our city because of the greater advantages to be obtained in the textile manufacturing fields elsewhere.

By 1926 the southern plant was fully completed and was turning out a coarser quality blanket in large volume. The more difficult weaves were still being made in the New Bedford plant.

The emphasis on the lower production costs prevailing in the South is again illustrated in a statement by Mr. C. D. Owen, Treasurer of the Beacon Company in February, 1929:

> We believe the textile situation in New England is improving fast. We have been able to maintain our sales volume only because

we have taken business at prices which in former years would have been ruinous. This was possible because we had a southern plant and by means of it we have been able to substantially reduce the production costs.... Due to the character of the work and the difference in working hours, we find we are producing about half our total output in the South and half in New Bedford. It is interesting to note that we are turning out now 15 per cent more goods with 1,100 workers approximately than we formerly did when we had a working force of 1,600 workers all located in New Bedford.

Losses were suffered by the company in 1930, 1931 and 1932. The latter year was the last full year of this company's operations in New Bedford. In 1933 its equipment was moved to its Swananoa, North Carolina plant and from then on the company's operations were carried on entirely in the southern plant. The City of New Bedford acquired all the mill buildings except the warehouse through default in payment of taxes and these buildings were demolished as a WPA project in 1937.

TABLE 28[a]

RATE OF EARNINGS ON CAPITAL STOCK[b] OF THE BEACON MANUFACTURING COMPANY

Year	Rate	Year	Rate
1906	27%	1920	118%
1907	17	1921	27
1908	30	1922	34
1909	21	1923	18
1910	7	1924	15
1911	12	1925	12
1912	15	1926	9
1913	46	1927	18
1914	34	1928	14
1915	20	1929	18
1916	26	1930	—9[c]
1917	39	1931	—6[c]
1918	27	1932	—4[c]
1919	47		

[a] From the reports of Sanford and Kelley, New Bedford cotton brokers.

[b] The capital stock of the company was more than tripled in the 1920's and the rates during those years should be judged accordingly.

[c] Loss.

CHAPTER IV

OTHER FACTORS IN NEW BEDFORD'S DECLINE

"While I have been very happy in my work and the knowledge that I was successful and able to take care of myself, in some respects I have been as lonesome as a salmon would be in a millpond surrounded by suckers or tadpoles."

Walter Langshaw, President of Dartmouth Mills.

THE depression in New Bedford was caused by the shift of its basic industry to the southern lower-cost area. Acting together with this fundamental influence there have been a number of other factors of lesser importance yet significant insofar as they helped to bring down the already tottering structure. By themselves they could not account for the tremendous decline in the cotton textile industry. Added to southern competition, however, they complete the picture of the causes of New Bedford's decline.

When an industry or a particular firm is very profitable it can afford to tolerate such things as mediocre management and take in its stride some competition from imports or domestically produced competing goods. When, however, depression sets in and the margin between profit and loss narrows, these previously unimportant factors often determine the difference between the successful operation of the business and its failure. Of this change the New Bedford cotton textile industry is a very good example. During the prosperous years before 1920 practically nothing was heard about unprogressive management, and the disturbing influence of competing silk and rayon products, while recognized, did not loom large in the calculations of cotton textile mills, for they were then making great profits. But when depression came, these factors took on added importance and one began to hear more about them than about southern competition.

Ownership, Management, and Control

The New England cotton textile industry has been frequently criticized, especially in more recent years, for traditionalism and unprogressive management. It is often asserted that the system of family control of cotton mills has been a serious handicap in competition with the South where younger, more modern and progressive managements have been the rule.

The reasons for the growth of a system of family control are essentially historical. Most of the New England cotton mills (and this is true of New Bedford as well) started at a time when the issuance of stocks and bonds to the general public was not the common practice in raising the capital of a business. Many of the mills were started by families which had made their fortunes as merchants and then invested in industry when circumstances arose which made trading less profitable. The manufacturing concern in which they invested their funds continued to be a family affair. Since they occupied pivotal positions in the city's industry, members of these families found important posts in the financial institutions and other industrial enterprises of the city. It was not long before a web of interlocking directorates emerged, bringing control of many enterprises into the hands of a small number of families.

This system reached its climax in New Bedford. The accompanying charts indicate the maze of interlocking directorates between the mills, between the banks and between the mills and the banks. The year 1910 was chosen to illustrate the situation because by that time practically all of the cotton textile mills and banks of the city were already in existence. Of the twenty-nine mills listed in Figure 7, only one, the Sharp Mill, which was controlled by outside interests, was not interlocked with at least one other mill. Every bank (Figure 8) had a common director with some other bank. In Figure 9 only one line was drawn connecting two mills or banks no matter how many directors in common they had. If a line were drawn for every interlocking director, the charts would be a mass of black lines.

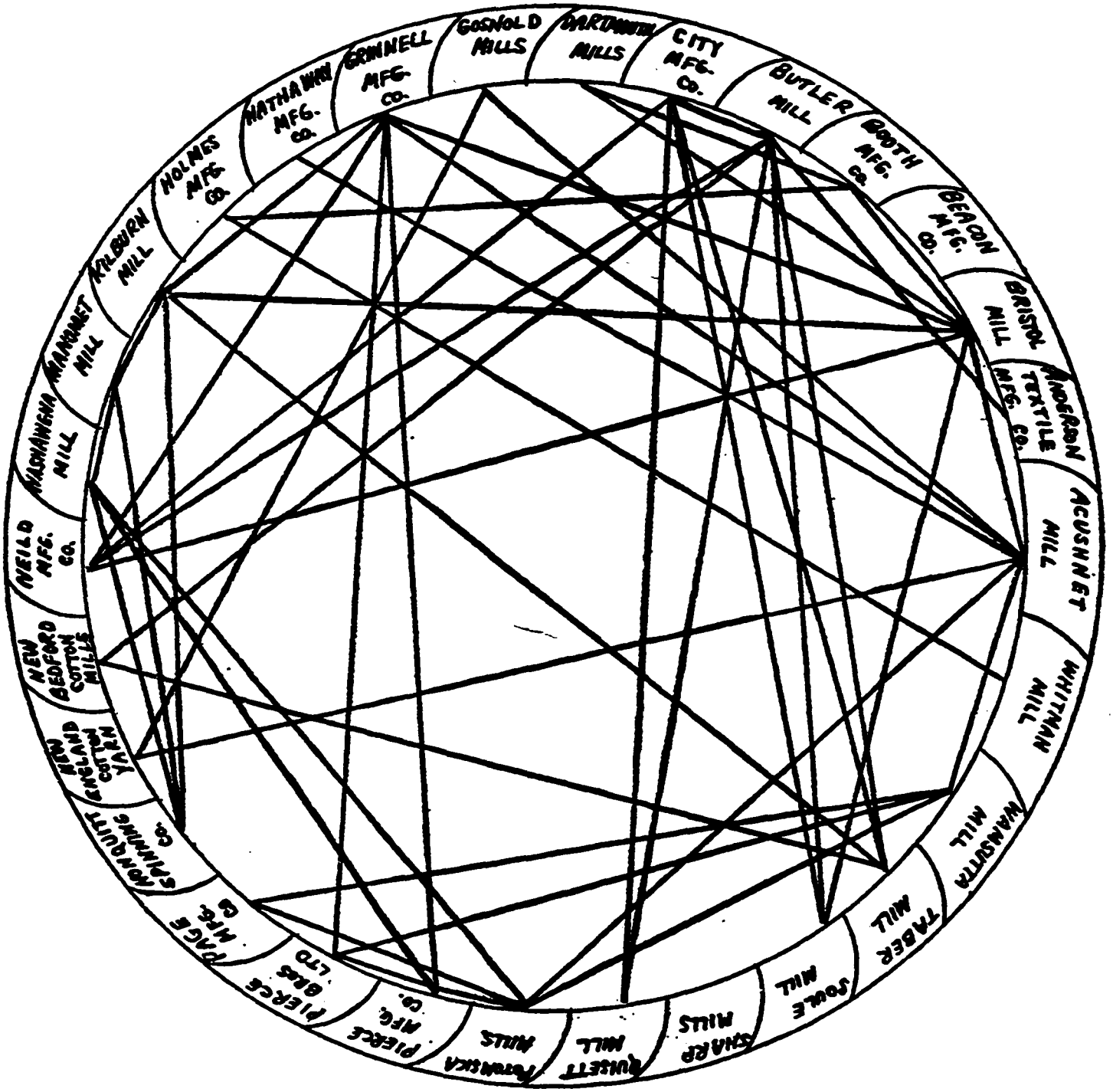


FIG. 7. INTERLOCKING DIRECTORATES, COTTON MILLS, NEW BEDFORD, 1910

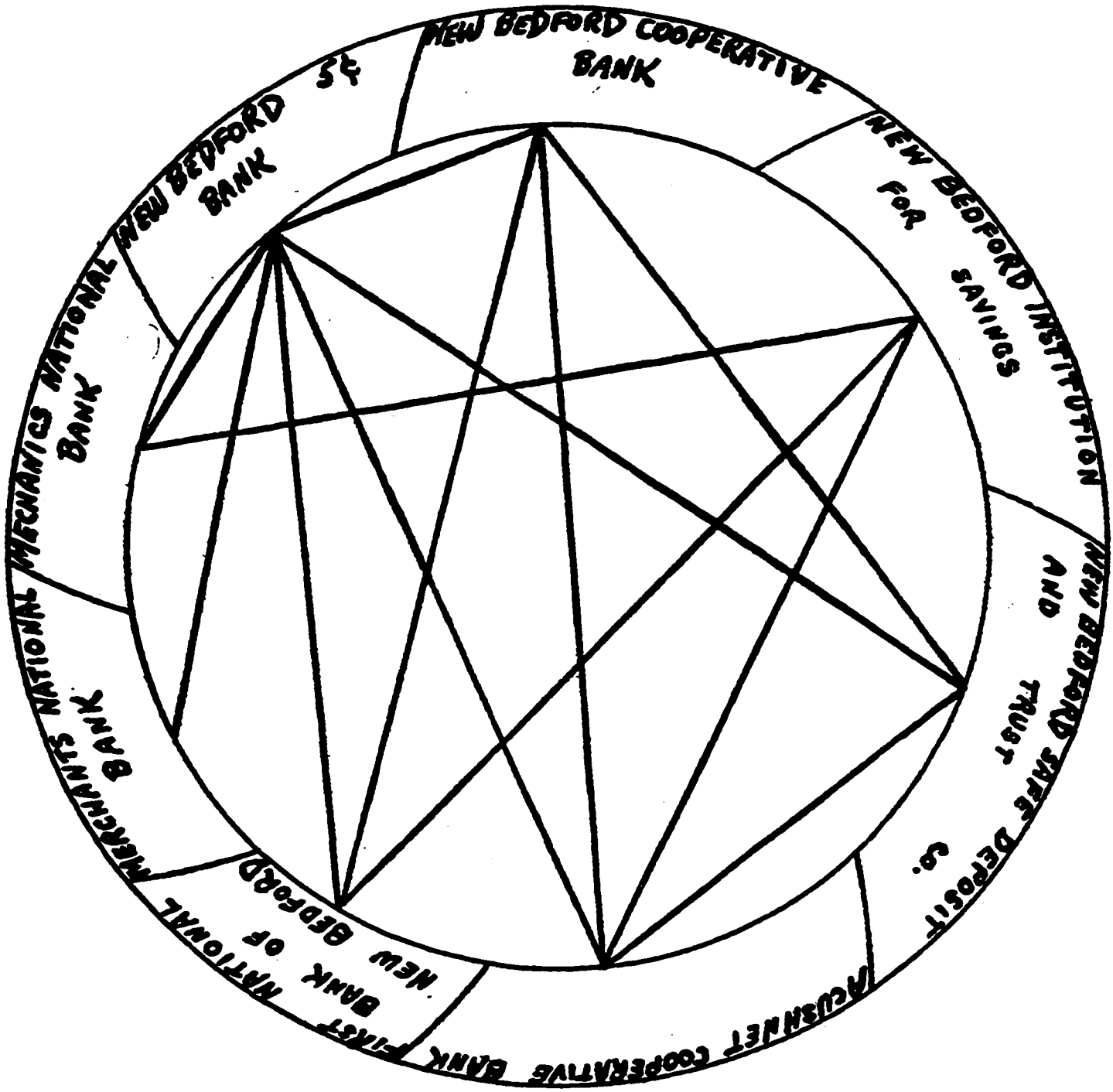


FIG. 8. INTERLOCKING DIRECTORATES, NEW BEDFORD BANKS, 1910

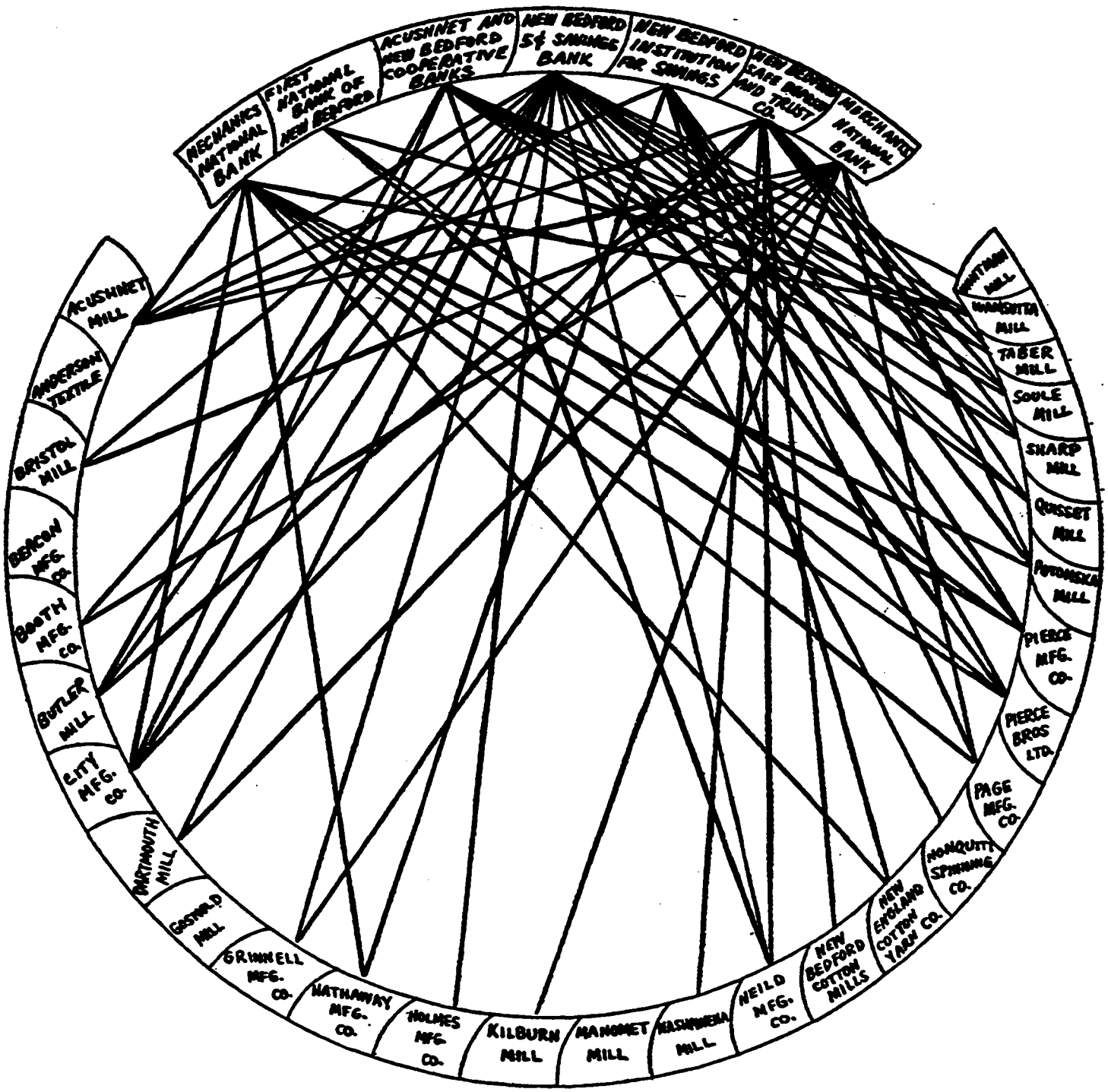


FIG. 9. INTERLOCKING DIRECTORATES, MILLS AND BANKS, NEW BEDFORD, 1910

Not only were the cotton mills and financial institutions of New Bedford closely interlocked, they were so joined by a comparatively small number of persons belonging to the more important families of the city. Throughout New Bedford's history the familiar pattern of son succeeding father who, in turn, had succeeded his father to important positions in the mills and banks, has gone on with great regularity.[1]

During the years of New Bedford's cotton textile prosperity there was no criticism of this system of interlocking directorates and family control. With the advent of depression in the industry in the nineteen twenties, however, the system began to be subjected to attack.

The most vigorous criticism came from Walter Langshaw of the Dartmouth Manufacturing Corporation, president of one of the New Bedford mills. Mr. Langshaw had risen from the ranks of the textile workers to head the successful Dartmouth mill which he started with the aid of outside capital. During the strike of 1928 he wrote a long letter to the New Bedford *Standard* (August 10, 1928) in which he attacked the system of interlocking control and its leaders. Mr. Langshaw, who kept outside the manufacturers' association of the city, did not cut wages as did the rest of the mills. His company, therefore, was not struck. He did, however, have an agreement with his employees to abide by any settlement arising out of the strike.

The letter was devoted to a detailed exposition of interlocking directorates and family control in the city and in it Mr. Langshaw complained that his name was nowhere to be found on the list of these directorates despite the fact that he was one of the largest investors in New Bedford.

> The cotton business [he said] has suffered more because official salaried positions have been given to sons or friends of those who had pull, and whose investments were negligible, without regard to qualifications in any respect. There are many who have been

1 Information on the system of family control and interlocking directorates from material in the files of the Division of Research, WPA, Social Research Section.

drawing $10,000 to $25,000 a year as officials in the cotton manufacturing business whom I would pension rather than have them in the employ of the Dartmouth Mfg. Corporation.

Another indication of the dissatisfaction with the mill managements can be found in the criticism made by the financial house of Sanford and Kelley in their yearly reviews of the state of the industry. In 1927 they pointed out that:

It is not only textiles, but many other lines of industry that have flown South or West to escape the results of tradition and managements hiding behind a large invested capital but represented by a small par value of capital stock. This is one of the primary causes why inefficiency of management in New England escapes unpunished for such long periods, while capital and labor seek more healthy conditions in other districts.

In 1930, Sanford and Kelley hailed the entrance of new owners in some of the mills and ventured the opinion that "... some of the exceedingly large losses that have been experienced, particularly in the last year or so, would have been prevented by an earlier change either of methods or managements."

The next year they reiterated their faith in new managements:

Before the textile business is entirely restored to a profit basis, many who had never learned the lesson will have to be convinced that in the operations of the industry many inefficient human elements will have to be removed and selection made by men of trained judgment.

The system of family control and interlocking directorates was not a major cause of the troubles that beset New Bedford and its leading industry. In fact, many of the mill managements have been and are progressive. They have made sincere efforts to solve the industry's problems, replacing out-of-date equipment, overhauling obsolete merchandising and distributing methods, carefully conserving and guarding their fund of technical skill and experience, diversifying their products and

adapting machinery to the manufacture of rayon goods and rayon and silk mixtures.[2] And many of these efficiently operated mills have survived.

It is obvious, however, that hereditary management, excluding as it does the chance for other men of ability to occupy important positions, is likely in time to result in inefficiency. In conjunction with other causes, "traditional" management and its inability to cope with the newer problems of the post-war period was a factor in New Bedford's decline.

Tied up with the factor of management is the matter of accounting methods, in which practically all of the cotton textile mills were deficient. The industry, as a whole, in fact is well known for its poor accounting principles and New Bedford was no exception. Failure to write off plant and equipment by adequate allowance for depreciation was very common, although the efforts of the Cotton Textile Institute have brought improvement in this direction. Since depreciation was not taken into account, profits were overstated and large dividends were consequently paid out of partly fictitious earnings. The result was that many mills found themselves without sufficient funds to provide for replacement of worn-out equipment and modernization of plant. Resulting obsolescence played an important part in adding to the South's differential advantage over New England.

Kennedy, in his *Profits and Losses in Textiles* has the following to say concerning the Booth and Taber mills of New Bedford, two of the first manufacturing companies to get loans from the RFC:

> An analysis indicates that they had been operating at a loss continuously for many years, and that in their computation of selling prices no adequate allowances had been made for depreciation. As a result, their reported losses were much less than would have been shown had a charge been made for depreciation.

2 See the section on inter-fiber competition in this chapter.

IMPORTS

Imports from foreign countries have never been a serious problem to the cotton textile industry as a whole since they have rarely exceeded 3 percent of domestic production in any given year. For special branches of the industry, however, especially the New England and New Bedford areas, imports of fine goods have been of some importance.[3]

During the nineteen twenties New England manufacturers and especially those of New Bedford complained vigorously of the inadequate protection afforded the finer grades of yarn and fabrics. Under the tariff passed in 1922 effective protection stopped with the medium fine products, leaving the very fine goods open to competition from abroad. The importance of foreign competition during this time increased as the finer grade of product was reached, culminating in the goods of counts 121 and over where such competition was quite severe.

Thus, the hearings before Congress on tariff adjustment which resulted in the highly protective tariff of 1931 were full of complaints by New England and New Bedford representatives who protested the lack of protection for fine goods and asked for higher duties.[4] Most of these goods came from the United Kingdom, which possessed the equipment and skilled labor to produce high-priced specialty goods such as cotton broadcloth shirtings, venetian linings, organdies, lawns and marquisettes. Such imports, however, showed a considerable decline with the advent of the depression and the accompanying fall in demand for fine goods..

Current reciprocal trade agreements with a large number of countries have again brought complaints from the producers of fine cotton textile products. With the promulgation of the

3 The stir over importation of Japanese print cloth which showed a large increase in 1934-35 did not affect New Bedford and most of the New England region, since these imports were concentrated entirely in the coarser grades of goods.

4 See *Hearings* before the Committee on Ways and Means, House of Representatives, Seventieth Congress, Second Session. Vol. IX, Schedule 9, Cotton Manufactures, 1929.

trade pact with England in 1938, for example (which reduced the rate of duty on cotton goods over ninety counts by 18 percent) Russell T. Fisher, president of the National Association of Cotton Manufacturers asserted that:

> The largest concessions are granted on the finer yarns and fabrics that go to make the better end of cotton textiles, and it is in this section of the industry that the greatest effect will be felt.[5]

In a more recent pronouncement Mr. Fisher rejoiced that the outbreak of the war had postponed the effects of the reciprocal trade agreements remarking that:

> The remaining cotton mills in New England manufacture fine goods and specialties, and the concessions granted under these treaties are mostly on fine goods; hence the apprehension of the northern cotton industry.[6]

Such imports have played only a minor part in New Bedford's decline.[7] It seems clear, however, that despite their relative smallness they did exert a depressing influence on prices for which domestic goods could be sold and that their effects were most severely felt in New Bedford, whose products were in direct competition with the foreign-made goods.

Competition with Other Fibers

Broadly speaking, the products of cotton manufacturing are put to three different uses. Some of the goods appear as wearing apparel, others go into agriculture and industry in a great

5 *New York Times*, Saturday, November 19, 1938.

6 *Transcript*, Boston, Massachusetts, January 13, 1940.

7 Interesting in this connection (and this ties up with the section on management) is Mr. Langshaw's statement (reported in New Bedford *Standard*, May 7, 1929) showing the relatively minor importance of imports: "The Textile industry needs protection not from importations, which are infinitesimal compared to the volume which would be required to operate machinery which has been idle in recent years, but from inefficient managers and salaried officials who operate their mills often at full capacity and show a loss."

variety of forms and some are used in the household as tablecloths, curtains, blankets, etc. Within each of these groups cotton finds itself subject to increasing competition from rayon, wool, silk, jute, and paper.

The increased use of rayon for wearing apparel is already well-known. But the competition it gives to cotton is much greater than that. With three exceptions, there is a similar cotton product for every one of the 165 uses to which the rayon fiber is put. The three exceptions are the relatively unimportant items of artificial horsehair, imitation straw, and wigs.[8] Wool and silk, of course, compete with cotton in the field of wearing apparel while jute competes in the agricultural and industrial field (baggage and cordage). Paper today competes with cotton in a wide variety of uses, including handkerchiefs, surgical dressings, napkins and towels.

The competition of others fibers is one of the major problems faced by the cotton textile industry. As the president of the Cotton Textile Institute recently said, " Cotton is unique among the major agricultural commodities in its vulnerability to competition from powerful and aggressive substitutes." [9] Pointing to the disquieting features of increasing rayon competition, he continues in the following vein:

Important inroads upon cotton have also been made by paper and this innovation is still rapidly proceeding. All of us are witnesses to the wide use of paper towels, napkins, and table covers, but paper as a competitor of cotton has probably had its greatest success in the bag trade. . . . In numerous stores consumers are now charged an extra price of as much as two cents for five pounds of sugar bought in a cotton packet rather than in a paper bag. Furthermore, in addition to this new competition from paper as a material for containers, cotton also protects itself with increasing difficulty from such substitutes as pasteboard cartons, wood crates and tin cans, all of which competition is primarily on a price basis.[10]

8 See Senate Document 126, p. 88.

9 New Bedford *Standard-Times*, December 17, 1939.

10 New Bedford *Standard-Times*, December 17, 1939.

The fine-goods New England area has suffered mostly from competition by silk and rayon. The vogue for these fibers has made very deep inroads into the amount of cotton yarn spun in New Bedford. The practical elimination of cotton hosiery and the heavy decline in the use of cotton knit underwear have hit New Bedford particularly hard, for many of its yarn mills had been putting out hundreds of thousands of pounds of cotton yarn which went into the production of the highest quality cotton hosiery and underwear.

Yet, New Bedford's position in this regard again illustrates the difference between the situation in that city and the rest of the northern cotton textile manufacturing industry. For many New Bedford mills which had the foresight to see the trend to silk and rayon as something permanent, instead of entering into intense competition with the rival products, welcomed them. The skilled labor supply and the fine goods machinery made the transfer to silk and rayon comparatively easy, and these mills embarked on an increased use of silk and rayon in combination with cotton goods. And, as early as 1927, a local mill man was able to say that:

> I firmly believe that if it were not for their ability to handle rayon in combination with cotton, most of the New Bedford mills would be closed down today or running under heavy curtailment schedules.

Of the nine remaining cotton cloth mills in New Bedford (excluding the tire fabric mills) for which information was available, four also engaged in the weaving of rayon and another two also used silk. Both the Gosnold and Hathaway mills, leaders in this movement, are today among the most profitable cotton textile mills in the city.

Besides witnessing the increased use of silk and rayon by its cotton textile mills the city has seen the manufacture of silk and rayon goods as such rise to a position second in importance only to cotton goods. From a comparatively minor activity the silk and rayon goods industry has grown until it now accounts

for about one-fifth of the average number of wage earners employed in manufacturing in New Bedford. The average annual wage in the silk and rayon industry incidentally, is about $100 higher than in cotton textiles (*cf.* Table 33).

Thus, while rayon has been an important competitor and was another of the factors that added to the troubles of the cotton mills, New Bedford has been able to adapt itself to the point where this fiber has given employment to a sizeable part of its working population.[11]

The Depression of the Thirties

The depression which began in 1930 was a serious blow to an industry already heavily undermined by its competitive struggle with another and more successful region. Between 1930 and 1934 no less than 12 of the cotton textile companies in New Bedford stopped operations, some immediately going out of business, one (Beacon) completing its movement to the South, others reorganizing only to fail soon thereafter.

The effects of the general depression upon the New Bedford cotton textile industry were, broadly speaking, two in number. Its first effect was to give added impetus to the shift to the South. The depression brought with it decreasing prices and diminishing demand and resulted in great pressure to reduce costs as the margin between profit and loss grew increasingly narrower. It was in the South that costs of production were lowest. The best case in point was the Beacon Company which, after a very profitable career, suffered losses in 1930, 1931, and 1932 and thereupon decided to complete its movement to the South.[12]

The second effect involved New Bedford more directly, for it struck a telling blow at the demand for the type of goods in

11 There is an additional number of employees engaged in the making of the rayon fiber itself, which in turn is woven into cloth. The production of the rayon *fiber* is a chemical process and should not be confused with rayon *cloth* production which is classified under textiles. The role of these industries in New Bedford's more recent history is given in chapter 5.

12 See last section of chapter 3.

whose production the city specialized. It was only natural that the depression would sharply curtail the demand for fine quality and expensive products. The negligible decrease in production (less than 1 percent) of such items as sheetings and osnaburgs and the small increase in the output of print cloth and shirtings in the period 1929-1933 contrast sharply with the large decline in the finer goods such as voiles (51%), plushes, velvets and velveteens (66%) and cotton table damask (56%) during the same period.

The general depression of the thirties completed the disruption of cotton textiles in New Bedford. It will be remembered that most of the yarn mills had closed earlier, followed by the tire fabric mills. Now it was the turn of the fine goods mills whose ability to survive during the decade of the twenties was overcome by the effect of the latest depression on the demand for their product.

PART THREE

ATTEMPTS AT SOLUTION

CHAPTER V

ADJUSTMENT AND READJUSTMENT: BRINGING IN THE NEW

"I declare tonight that New Bedford is in a state of war against unemployment. Therefore, we are going to use war measures and military methods, using dollars in place of bullets to fight the enemy of unemployment. War means an army and that is what we are organizing, and we are going to call it the Industrial Development Legion."

The Mayor of New Bedford, Massachusetts, January 13, 1938.

THE experience of New Bedford in twice having to find a new way of earning its living is perhaps unique in the history of the American city. Seventy years ago the whaling industry began its decline in the face of competition from petroleum. New Bedford's adjustment to that situation was successful. With the example of other New England cities before them, the wealthy whalers transferred their huge capital surpluses into the establishment of cotton textile mills, initiating a development which was to continue almost uninterruptedly until after the World War. As a result, the name of New Bedford, one of the fastest growing cities in the country, became practically synonymous with that of fine cotton goods.

The post-war period brought an end to New Bedford's prosperity, and as one cotton textile mill after another liquidated the rapid growth of earlier years was replaced by the problems of industrial decline. The consequences of overspecialization were revealed in the thousands of idle mill workers, the swelling relief rolls, the rising taxes, the empty tenements, and the razing of great factories. Once again New Bedford sought an alternative means of livelihood.

The effects of the decline of the cotton textile industry on the city have already been discussed in some detail. Between the years 1919 and 1937 the number of wage jobs that were lost in the cotton textile industry in New Bedford totaled 21,000. In view of the number of persons dependent on each worker

attached to that industry and the fact that other lines of economic activity in the city also felt the shock of the depression, it is probable that at least 60,000 persons, or one-half of the entire population, were directly and immediately affected by the collapse in cotton textiles.

The problem New Bedford faced may be simply stated: How was the livelihood of these 60,000 people to be restored? How were 60,000 people to be fed, housed and clothed now that they, and those on whom they depended, could no longer look to cotton textiles and other auxiliary jobs for a weekly wage? Of course, the problem was never presented in any such clearcut and incisive fashion as this. The disemployment of the 21,000 workers was a more or less continuous process over a number of years and attempts at the solution of the problem were pursued energetically during the same period. Nevertheless, it directly affected every group in the community: the workers whose savings were gone, the landlord struggling to pay his tax bill and wondering how far he should go in trying to collect rent from his impoverished tenants, the merchant who saw his sales falling off and was threatened with bankruptcy, the city official seeking revenue with which to carry on the activities of municipal government. Each and all felt the need of finding the answer.

Regional Consciousness and Community Action

The city of New Bedford was not alone in its attempts to find an answer to this problem. The post-war period has witnessed a steady shift of industrial enterprise away from the New England area to the midwestern and southeastern states. The declining relative importance of New England in the industrial scheme of things (See Table 29) began to arouse considerable anxiety in the early nineteen twenties.

Part of this relative decline, of course, is attributable to the general growth of population and industrial expansion in other parts of the United States. This cannot be regarded as a flight from New England, but simply as the economic development

of newer regions. Part of it, however, is due to a shift in industrial location from the older and more highly industrialized areas to the newer low-cost regions. The best example of such a shift is the migration of the cotton textile industry.

The impact of the changing trend in the localization of industry has been intensified by the economic specialization which characterizes so many of the New England cities. Especially is this true in the regions dependent upon cotton textiles and shoe manufacturing, in which industries most of the regional losses, such as New Bedford, Fall River, Lowell, Lawrence, Haverhill, and Manchester, have been concentrated.

TABLE 29[a]

REGIONAL DISTRIBUTION OF WAGE EARNERS IN UNITED STATES MANUFACTURING, BY SPECIFIED CENSUS YEARS

Census year	Average number of wage earners employed in manufacturing		
	United States	New England	Percent in New England
1900	5,288,132	947,645	17.9
1919	9,085,890	1,351,389	14.9
1929	8,838,743	1,098,514	12.4
1937	8,569,231	1,022,350	11.9

[a] U. S. Department of Commerce, Bureau of the Census.

The straits to which these specialized localities have been reduced have resulted in the development of a form of regional consciousness, stimulating community action designed to arrest the exodus of factories and to encourage the entrance of new industries.

One expression of this movement was the formation in 1924 of the New England Council. This organization makes numerous industrial surveys of regional problems, works out programs for regional development and recommends legislation aimed at remedying the situation, especially from the businessman's point of view. Numerous industrial commissions and special legis-

lative committees have also been set up by individual states in an attempt to reduce the economic stagnation which affects large areas throughout the region.

Community action has played a highly important role in New Bedford. A year before the great strike of 1928, the New Bedford *Standard* launched a movement to raise funds for new industries. The newspaper urged the city to abandon its passive attitude and enter upon an aggressive search for new factories, and contributed $500 to start the fund.[1]

It seems probable that the long and costly 1928 strike in the cotton textile mills was largely responsible for the first real awakening of the community and the beginning of an active fight to save the mills and bring in other industries. It was at about that time that the Industrial Development Division of the New Bedford Board of Commerce was formed. Its task was to seek out and negotiate with any outside business organizations which might be induced to locate in New Bedford and to do everything in its power to preserve existing industries. The six months' strike of 1928 had focused a strong light on the weakness of the city's economic structure, dependent as it was upon the fortunes of one particular industry, and the organization of the Industrial Development Division was an indication that the community was taking cognizance of the situation.

In the spring of 1929, under a "Help New Bedford Plan," the Board of Commerce initiated a program involving a public exposition of products made in New Bedford. Field meets and other forms of community entertainment were held and open house in the industrial plants was featured. Slogans were suggested and cash prizes were offered for posters and sketches to be used in the "Bigger and Better New Bedford" campaign. Local retail establishments cooperated in displaying local products. The purpose of all this was to create greater public interest in and sympathy for the welfare of New Bedford's industry.

1 See the New Bedford *Standard* for the month of February, 1927.

This was followed in 1930 by the "New Bedford Forward" movement, also initiated by the Board of Commerce of the city. This movement contemplated a drive for increased membership, greater financial support for the Board and solicitation of ideas and suggestions on types of new industries to be sought and methods of obtaining their entrance into New Bedford.

As the depression deepened, various citizens' committees and local councilmanic committees were formed to boost New Bedford. Their number was quite large. Finally they were absorbed by an organization called the Industrial Development Legion which has become the spearhead for attempts to induce new businesses to locate in the city.

The organization of the Industrial Development Legion epitomizes the whole idea of community action for solving the city's problem. The dramatic way in which the Mayor of the city initiated this organization early in 1938 (see the quotation at the head of this chapter) stirred the entire community. The Legion was organized along military lines. The Mayor designated himself its commander-in-chief and appointed a chief of staff and a number of colonels who, in turn, were empowered to appoint captains, lieutenants and other officers.

With the avowed purpose of bringing about the reemployment of the jobless New Bedford workers, a goal of a $50,000 war chest was set. Campaign pins were presented to contributors bearing the slogan "A New Dawn—Help New Bedford Smile Again." A definite period of enlistment of 2 years in the Legion was set ("It is sincerely hoped that peace will have been declared before or at the end of that time").[2] Everyone was pressed into the service ("Slackers or traitors can expect no mercy").[3] Regular corps designations were assigned and military reviews held, distinguished community medals were to be awarded, and a high-salaried full-time leader—an industrial agent for the city—was appointed. Rent-free head-

2 See the New Bedford *Standard-Times*, January 13, 1938.

3 *Ibid.*

quarters were set up in the New Bedford *Standard-Times* building and operations began.

All of this makes it plain that there was no lack of organization or of enthusiasm in the drive to bring prosperity back to New Bedford. The attack in that direction went forward on two broad fronts—an attempt to preserve those industries already located within New Bedford and a program of bringing into the city new establishments with new opportunities for employment.

Bringing in the New

The attempt to bring new industries and new employment opportunities into New Bedford was essentially an attempt to diversity the city's industrial economy. New Bedford had ample experience with the danger of specializing in one particular kind of activity and no one wanted it to become a one-industry town again.

The net effect of this drive to induce new plants to come into New Bedford (especially through the efforts of the Industrial Development Legion) was the migration into the city of a number of factories of different sizes, producing a wide diversity of products. Plants making shirts, overalls, bedspreads, pajamas, toys, blouses, pocketbooks, novelties, shoes, electrical equipment, etc. have come to New Bedford. Their essential characteristic was their diversity and no one reason can be singled out to explain why they chose their destination. They form an excellent sample of the variety of economic enterprise that characteristically flocks to a depressed area.

Most of these plants were of the light industry type, with no appreciable investment in land and buildings and equipment. One of the outstanding inducements for such industries to move into New Bedford lay in the millions of square feet of factory space left vacant by the passing of the cotton textile mills. The decline of cotton textile manufacturing threw more than 10,000,000 square feet of floor space on the market, available

at ten to twelve cents a square foot. Most of this vacant property was of the two and three story type, considered more suitable than the older four and five story buildings to be found in cities like Fall River. The buildings in New Bedford are of fairly recent construction; they have a great deal of window space which insures adequate lighting and are built of brick, a factor which decreases fire insurance costs.

One other factor of importance in bringing new industry into New Bedford was the large amount of low-wage labor, the supply of which became more and more abundant as one after another of the cotton textile mills passed out of existence. The importance of this factor is clearly seen in the experience of the clothing industry.

While cheap factory space and low-wage labor were perhaps the most important influences in encouraging new enterprises to locate in New Bedford, many of these plants were brought in by other special inducements offered by the city.

For example, on December 10, 1937, the New Bedford City Council granted to a Brooklyn, New York, firm of bedspread manufacturers a ten year lease of 14,000 square feet of the empty Whitman mill No. 2, at a total rental of $5,000 for the entire period. The company agreed to employ an average of 50 people a week each year. The first $1,000 of the rent did not have to be paid until five years after the signing of the lease. In addition the city agreed to provide heat free for a period of two years, and the company was in no case to pay more than $400 a year for heat thereafter. Furthermore, the city was to maintain a night watchman on the property and also obligated itself for repairs.

In December of the same year, the Fairhaven Realty Corporation which operated the old Fairhaven mill properties and which had succeeded in bringing a large number of small enterprises into the plant, complained that the competition it was getting from city-owned property in neighboring localities was making it impossible to operate at a profit. With the jobs of

several thousand who were employed in these small factories thus put in jeopardy, the city council decided to lease the boiler facilities of the city-owned Pemaquid mill to this realty company at the price of one dollar a year.

Another example of the city's action along these lines is the sale of the entire Whitman mill (valued at more than three quarters of million dollars) to a canning concern for a total price of $500, with certain guarantees to protect the city's interest in the property. This company began operations in September, 1939. It is now canning cranberries, of which there is a plentiful supply in the bogs of nearby Plymouth County and the Cape Cod area. Proximity to the fruit-growing area, combined with the convenience of the New Bedford location as a regional distribution center, practically free factory space and a plentiful supply of labor was enough to make the city's location an attractive one to the company.

The activities of the Industrial Development Legion were also important in attracting a number of new industries into the city. One example is the case of a Brooklyn firm of manufacturers of parts and accessories for electrical equipment. The Legion agreed to pay $42,500 of the company's $70,000 moving costs, payment being made after the company began operations. This expenditure by the Legion, incidentally, practically drained it of its funds and made necessary a drive for more money.

Out of the welter of small businesses that came into New Bedford, two broad groups have assumed importance, i. e., the clothing industry and the manufacture of silk and rayon. A more detailed discussion of both of these provides a greater insight into the reasons for the migration of industry into the city and also tells a significant story of the conditions these new enterprises brought into New Bedford.

Clothing

The depression of the thirties not only added to the woes of New Bedford but also had a severely adverse effect upon New York's garment trade. The garment industry, in normal times,

is characterized by intense competition and many small manufacturers fail each year. The depression increased the pressure upon prices and brought with it a tendency towards the cheaper grades of goods as people turned from the high to low priced fabrics.

Under such conditions, manufacturers attempted to cut costs of production as much as possible. Since labor represents one of the biggest items of cost in the garment trade (machinery and equipment investment is comparatively low and most of the units in the industry are quite small), manufacturers have a powerful incentive to reduce wages when business is bad.

Wage cutting, however, is difficult since New York's garment trade is one of the most highly unionized industries in the entire country. It is not surprising, therefore, that manufacturers are often tempted to move from New York to lower wage and cost regions. Moving is not a difficult matter, especially since the investment in land and buildings is negligible and the equipment very small. If they could find some smaller city not very far from New York with an abundant supply of low wage labor, their problem would be solved.

There has long been a substantial migration of the apparel industry from New York into northern New Jersey cities, into Connecticut and many southern Massachusetts localities, including New Bedford. Although New Bedford had a long history of labor organization behind it, the disastrous strike of 1928 and the unemployment which followed it had broken the militant labor spirit in the city. Cotton textile employees and their families were eager to grasp at any opportunity to earn a wage again. The large amount of lower-wage female labor was still another factor, as was the fact that New Bedford had a higher proportion (48.6%) of families with two or more workers than any other city of 100,000 population or more.[4] Such considerations counterbalanced the desire on the part of the manufacturer to stay in New York, the style center of the country.

4 U. S. Decennial Census of 1930.

These factors added to the low rentals for space in old mill buildings and the fact that it is possible to get overnight boat service to New York from the city, also strongly favored New Bedford.

Data on the extent of the growth of the clothing industry in New Bedford are meager. Figures from the State Department of Labor and Industries [5] are available for the years 1937 and 1938 and do give some indication of that industry's size. (See Table 30). These figures show that the clothing industry in 1938 employed about 8% of all the workers in New Bedford's manufacturing. This made the clothing industry the third ranking one in number of employees, cotton textiles and silk and rayon being first and second respectively. Altogether the industry paid about one million dollars annually in wages to New Bedford employees.

TABLE 30 [a]

THE CLOTHING INDUSTRY IN NEW BEDFORD, MASSACHUSETTS, 1937–1938

Year	No. of establishments	Wages paid	Average no. of wage-earners
1937	8	$821,329	1,205
1938	9	923,007	1,399

[a] Massachusetts Annual Census of Manufacturing.

TABLE 31 [a]

AVERAGE YEARLY WAGES IN SELECTED INDUSTRIES IN NEW BEDFORD, MASS., 1937–1938

Year	Average Yearly Wages			
	All mfg.	Cotton textiles	Silk and rayon	Clothing
1937	$884.24	$844.09	$881.36	$681.60
1938	832.71	766.99	869.31	651.76

[a] Massachusetts Annual Census of Manufacturing.

5 Annual Census of Manufacturing. (Mass.)

The garment manufacturers were not disappointed in their expectations that they would find low-wage labor in New Bedford. As Table 31 shows, the average yearly wage that they paid was only about three-fourths as large as the average yearly wage paid by the other two ranking industries and all manufacturing in the city. When the NRA became effective, the codes for the garment industry established a minimum wage and set a maximum on hours of work. Throughout the period of the NRA, however, there were constant complaints that the manufacturers were not living up to the code provisions and were paying as low as $5 a week to the young girls who formed a majority of their labor force. The result was that the employees went out on strike.

After the NRA working conditions in these plants deteriorated again and a number of strikes were called in 1936. The garment unions, in accordance with their plan of following these runaway garment plants and unionizing them, sent organizers to New Bedford to bring the employees into the unions.

Opposition to the low wages being paid in the garment trade was stimulated by the reference to the problem by President Roosevelt. In discussing child labor, long working hours, and low wages at a press conference,[6] the President told the assembled newspapermen of a letter handed to him by a factory girl during his visit to New Bedford in October of 1935. It read as follows:

> I wish you would do something to help us girls. You are the only recourse we have left. We are working in a garment factory, and a few months ago our minimum wages were $11. Today they have been cut down to $4 and $5 and $6. Please send someone from Washington to restore our minimum wage so that we can live.[7]

This incident emphasized the fundamental problem facing the city in its efforts to bring in new employment opportunities for its labor force. On the one hand, the city could try to bring

6 See *The New Bedford Standard-Times* of December 30, 1936.

7 *Ibid.*

any kind of new industry into New Bedford, as long as the empty buildings were occupied, taxes were paid, and work was offered to the long-unemployed men and women. It was comparatively easy to acquire some new industry under these circumstances. On the other hand, the city could attempt to maintain reasonable standards of wages and work conditions, and attempt to bring in only those plants which met such standards. This approach obviously would make the problem of securing new industries more difficult.

Mr. Batty, speaking for the New Bedford Textile Council, refused to consider the low-wage industries as desirable, expressed the belief that New Bedford would be better off without them, dubbed the runaway garment trade "industrial gypsies" and said:

> The Council does not share the belief that any industry offering employment under any conditions at any wage with an opportunity to rent idle floor space is necessarily a public good.[8]

Representative of the opposite view is the following editorial from the New Bedford *Standard* which stated on June 7, 1933, that:

> It is a pity that so valuable a community effort as that concerned with establishing new industries should have to encounter opposition on the grounds that many of these concerns have low wage scales. This is due to economic conditions, creating a vast reservoir of unemployed, not to depravity of the manufacturers.

Eventually, public sympathy turned to the garment workers. Early in 1937, an enthusiastic "anti-sweatshop" rally was held at which conditions in the garment plants were protested. Shortly thereafter the newly formed New Bedford Garment Manufacturers' Association held a conference with the Mayor in which they agreed to work under the conditions that prevailed under the NRA, and in July, 1938 under new state legislation the State Department of Labor and Industries pre-

8 See New Bedford *Standard-Times*.

scribed a $14 minimum wage for a 40 hour week. Still more recently the apparel industry committee of Wages and Hours Division of the U. S. Department of Labor has fixed a minimum wage for that industry under the Fair Labor Standards Act.

Thus, public opinion and social legislation forced wages up in New Bedford's garment industry and, in consequence, weakened the city's major appeal to that and other industries.

Silk and Rayon

The most important single development affecting the prospects for industrial recovery in New Bedford in the past decade was the rise of the silk and rayon industry. While the cotton textile industry has been shifting for many years from New England to the South, there has been a migration of the silk and rayon industry from the Middle Atlantic States to both the South and New England, including New Bedford.

Circumstances which have made textiles as a whole one of the most migratory of all American industries have operated with equal force in the silk and rayon branch. Here, as in cotton goods, the small size of the units in the industry makes for keen competition, labor costs form a high proportion of the total cost of the product, transportation costs of both raw materials and finished goods are relatively low. These characteristics have led to an almost continual movement in search of areas of low labor costs. Just as in the manufacture of cotton goods, movement by silk and rayon plants has been intensified by excess productive capacity resulting from technological advances, marketing conditions and the increased substitution of rayon for silk.

Before the Civil War, silk manufacturing was centered in New England. By about 1860, however, there began a succession of shifts which carried the industry first to New York City, then to New Jersey (especially Paterson) and then to Pennsylvania. In each of these shifts, the search for a low-wage labor supply was the paramount consideration, although there were other motives as well. The movement to New York was

a matter of getting close to the market; in the case of New Jersey the major consideration was an escape from the high ground rents and taxation in New York; in the shift to Pennsylvania special inducements of various types offered by small towns eager to find employment opportunities played an important part.

Since 1919 the movement to Pennsylvania from New Jersey has largely given way to a broader inter-regional migration from the Middle Atlantic states to the South and New England. The flight southward, of course, is based on the attraction of low-wage labor and has made for a decentralized industry, with most mills locating in small communities. New England, however, attracted those mills which were producing the higher grade and highly styled goods which required locations close to the New York market and style center, and a more skilled labor supply. The thousands of experienced cotton textile workers who had lost their jobs in the cotton industry furnished an abundant and skilled labor supply, while cities like New Bedford also offered overnight transportation service to New York City.

The production of silk and rayon goods is treated as one industry because the looms are easily interchangeable from one fiber to another, while both fibers meet much the same general demand. In recent years, however, rayon has become the leader in the industry. In 1926 rayon goods were only a small proportion of the total output. By 1937, all-rayon goods constituted 60% of the total yardage produced; silk represented 22% of the total and the remainder included silk-rayon mixtures.[9]

Table 32 indicates the trend of the silk and rayon industry away from the Middle Atlantic states. Broadly speaking, these states now have only one-half instead of three-fourths of the wage-earners in the industry. The remaining half is roughly divided between the South and New England.

9 *Biennial Census of Manufactures,* Bureau of the Census, U. S. Department of Commerce.

One other fact must be mentioned before the development of silk and rayon in New Bedford is discussed. The production of the rayon fiber itself is a chemical process, sharply distinguished from the actual weaving of the fiber into cloth. The production of the rayon fiber is carried on chiefly in the South. Out of a total of 33 establishments in this branch of the industry only four were located in the New England area in 1937 [10] and one of these four was located in New Bedford. This plant played a very interesting part in the development of the rayon weaving industry in New Bedford.

By the turn of the present century New Bedford's cotton textile mills were already using some silk in combination with cotton, and as early as 1912 a silk weaving mill had been established in the city, to be followed by several more during the nineteen twenties. When rayon entered the field of competition many predicted that New Bedford would become as famous a silk and rayon weaving center as it had been in fine cotton goods. However, the city failed to experience any great development until the middle of the nineteen thirties. Despite New Bedford's skilled labor, proximity to markets and good shipping facilities, silk manufacturers were moving into such small neighboring cities as Pawtucket, Rhode Island.

TABLE 32 [a]

REGIONAL DISTRIBUTION OF WAGE EARNERS IN THE SILK AND RAYON INDUSTRY, 1919, 1929, AND 1937

Year	Percent of Total Number of Wage Earners in			
	United States	Middle Atlantic States	New England	South
1919	100	77.9	17.0	2.4
1929	100	71.5	19.8	6.2
1937	100	51.1	24.4	21.1

[a] *Ibid.* For 1937, percentages were calculated on the basis of about nine-tenths of the wage-earners, the remainder not being broken down by states.

10 *Biennial Census of Manufactures*, Bureau of the Census, U. S. Department of Commerce, 1937.

In 1930, the city had lost one of its two biggest silk mills to Lebanon, Pennsylvania, after its employees in New Bedford had refused to accept a reduction in wages. The departure of this mill and the large increase in the number of unemployed men and women, undermined the wage structure in this industry. Lower wages stimulated the subsequent growth of the industry in New Bedford.

In the interim, the city, together with the rest of the Providence-Fall River-New Bedford area, was using more and more rayon in combination with cotton in the production of textile goods. This trend led the Delaware Rayon Co., one of the smaller rayon fiber producers, to purchase the huge Manomet Mills buildings for conversion into a factory making viscose rayon under a patent held by one of the large companies in the field.

This new plant presents an interesting example of the relation of auxiliary industries to factory location. The most important factors determining the location of the rayon fiber industry are labor, fuel and water supply. The presence of all these, especially low-cost labor in the South has concentrated the industry in that region. In this case, however, the company seems to have considered the presence of a sizable market for its product in New Bedford as the chief advantage, though the other requirements also were met fairly well in the city. In fact, during negotiations between city officials and the company, the city agreed to give new low water rates to large consumers such as this rayon company. The plant is still operating, employs about 500 to 600 workers and has an annual capacity of 3,500,000 pounds of rayon.

This rayon company seems to have come to New Bedford because there were a number of rayon weaving mills there to use its product. In turn, it drew to the city other rayon weaving mills. The rise in the importance of these mills is indicated by the fact that the number of wage-earners employed in the New Bedford silk and rayon industry rose from 1,176 in 1933 to a maximum of 5,793 in 1936, a four-fold increase.

The New Bedford textile industry has thus undergone a radical change in the past ten years. It has been transformed from a *cotton* textile industry into a *general* textile industry. There are mills spinning only cotton yarn, mills spinning and weaving cotton, mills weaving only cotton cloth, mills weaving only rayon cloth, mills weaving both cotton and rayon, mills weaving both silk and rayon, mills weaving silk, rayon and cotton, etc. The former method of dividing the textile industries into separate classifications based on the nature of the fiber used has broken down in New Bedford.

In order to gauge the importance of silk and rayon to the city it is necessary not only to note the data for that industry itself (see Table 33) but also take into consideration the number of cotton textile mills which use a great deal of rayon in the cloth they produce. The number of such mills as well as the variety of other fibers used in New Bedford's textile industry is indicated by the list in Table 34.

TABLE 33[a]

SILK AND RAYON MANUFACTURING IN NEW BEDFORD, MASSACHUSETTS, 1933–1938

Year	Average No. of Wage-earners Employed During Year	Percent of All Wage-earners in Silk and Rayon	Wages Paid During Year	Average Annual Wage
1933	1,176	5%	$ 794,463	$675.56
1934	1,335	5	993,639	744.30
1935	4,850	20	3,882,501	800.52
1936	5,793	22	4,732,772	816.98
1937	5,181	19	4,566,302	881.36
1938	4,029	22	3,502,456	869.31

[a] Annual Census of Manufacturing, Massachusetts Department of Labor and Industries.

It should be pointed out that the increases shown in Table 33 do not actually arise out of an influx of new plants engaged in manufacture of silk and rayon into New Bedford. A good part

of it is due to the fact that two of the largest mills are now no longer included in the cotton textile industry by the Massachusetts Annual Census of Manufacturing, but have been transferred to silk and rayon. This was necessitated by the fact that the value of that part of their product which was silk and rayon became greater than that part which was cotton.

The number of employees engaged in the silk and rayon industry in New Bedford quadrupled between the years 1933 and 1936. The industry employed about one-fifth of all the workers in the city's manufacturing industries and paid the highest average annual wage. This industry is thus of no mean importance to New Bedford. The cotton textile mills are using more and more rayon in their products and this has been a very important factor in aiding them to survive. Two of the most prosperous mills in New Bedford today, the Hathaway and Gosnold plants, are leaders in the use of rayon fibers in their cloth.

TABLE 34[a]

TEXTILE MILLS EMPLOYING 100 OR MORE WAGE-EARNERS IN NEW BEDFORD, MASSACHUSETTS. AS OF THE YEAR 1939

Firestone Tire and Rubber	Tire fabrics
Fiske Rubber	Tire cord and tire fabric
Gosnold Mills	Rayon and cotton cloth
Hathaway Manufacturing	Cotton and rayon cloth
Hoosac Mills	Cotton cloth
Kendall Co.	Tobacco and print cloth
Kilburn Mills	Cotton yarns
Nashawena Mills	Woven cloth
Nonquitt Mills	Cotton and rayon yarn and fabrics
Pierce Bros.	Cotton, silk and rayon cloths
Quisset Mills	Cotton yarn
Ramsay Mills	Woven rayon cloth
Soule Mills	Cotton yarn, cotton and rayon fabrics
Wamsutta Mills	Sheets, shirting, pillow cases

[a] *A List of Manufacturing Establishments which Normally Employ 100 Wage-Earners* and Over. 1939. Massachusetts Department of Labor and Industries.

Conclusions

New industries were able to take up the slack in employment left by the collapse of the city's major industry. That this has been the case is perhaps best shown by considering the number of wage-earners attached to the cotton textile industry on the one hand and the number of wage-earners employed by the rest of the manufacturing industries on the other hand. Between 1927 and 1938, the number of wage-earners in cotton textiles decreased by 21,280. This decrease was accompanied by an increase of only 4,612 wage-earners in other industries, leaving a net reduction of 16,668.

Thus, by 1938 other industries had only given employment to about one-fifth as many workers as had been displaced in cotton textiles. At the same time, it must be remembered that more and more persons were coming into the labor market in search of work. These included not only youth growing up and beginning to look for employment, but also other persons in the family, usually not in the labor market, who began to look for work during the depression years when the primary worker became unemployed or suffered a decrease in his wages. The WPA Survey of Employment and Unemployment conducted in New Bedford showed that as many as 62 percent of all the families in the city with some member attached to the cotton textile industry had two or more workers in the family.

The primary goal of New Bedford's drive for new industry was the creation of new employment opportunities for the displaced cotton textile workers. That goal was not achieved.

CHAPTER VI

ADJUSTMENT AND READJUSTMENT: PRESERVING THE OLD

"If any industry will guarantee to employ a certain number of people for a period of years, I will sell them the Butler mill, the Pemaquid mill, or the Whitman mill for one dollar."

The Mayor of New Bedford, Nov. 28, 1937.

MEASURES designed to keep intact those industries already established in New Bedford were numerous. Some were set up with that aim specifically in mind, others incidentally had the same effect. Into the latter group fell several pieces of national legislation which were of great help to New Bedford simply because they were national in scope, e. g., minimum wage legislation.

The remaining measures were, of course, local or statewide in scope. They included tax relief to manufacturing companies, repeal or modification of some social legislation and employee participation plans aimed at collecting enough money to keep some of the tottering mills operating.

MINIMUM WAGES AND MAXIMUM HOURS

During the nineteen twenties it was quite difficult to convince most people in the New England area that the competition they were meeting from the South would eventually be responsible for a tremendous decline in a number of their industries. Certainly, it was argued, New Bedford was immune, for it had concentrated on the production of the finer cotton goods, in which field the South could never compete successfully. By 1930, however, it was generally realized that the primary cause of the losses suffered by the cotton textile industry was southern competition.

It was also realized that the primary factor in southern competition lay in the labor cost differential in favor of that region. Thus the New England manufacturer became the best friend

southern labor had. Not only the cotton textile manufacturer, but other New England businessmen, labor leaders and newspapers pointed to the low wages and the high number of working hours in the South and asked for remedial legislation.

It was felt that there were only two ways in which the labor cost differential in favor of the South could be eliminated. One way was to repeal or modify social legislation in the state which imposed limitations on the number of hours worked and fixed minimum wages. As has been pointed out, however, resistance to such a procedure in Massachusetts was very great. The other alternative was to bring conditions in the South up to those prevailing in the North. It was for this reason that the New England manufacturer became so keenly interested in the welfare of southern labor and a strong proponent of Federal legislation regulating wages and hours of work.

It is natural then, that the NRA was hailed with great enthusiasm in New Bedford. Labor leaders called the new cotton code an "industrial Bible"; mill operators and Board of Commerce officials, confident that New Bedford's mills were now placed on a fair competitive basis, looked forward to getting out of the depression; grocers and landlords hoped for some payment on their outstanding bills.

The period of the NRA may be called the Indian summer of New Bedford's cotton textile industry. The famous section 7a of the NRA, providing for wage minima, limitation on hours of work, and removal of hindrances to unionization, greatly reduced previous differentials in favor of the South and gave new life to the cotton textile industry in New England. Idle equipment was started up again and thousands went back to work in the mills. New Bedford and its sister cotton textile city, Fall River, were perhaps the biggest beneficiaries of the program of the NRA, and the huge parade of 30,000 persons in New Bedford in October, 1933, the greatest demonstration in the city's history, testified to the lift which it had received from the NRA.

The decrease in the number of spindles in New Bedford during these 2 years was very small (see Table 36). In reality, it merely represented the abandonment of obsolete equipment. Again, the increase in jobs in cotton textiles while the NRA was in existence was quite startling. The average number of wage earners in New Bedford cotton textile mills in the first year of the NRA (1933) was almost 50 percent higher than that of the previous year.

Despite the fact that the NRA proved such a boon to the city, both labor and manufacturers in New Bedford were not entirely satisfied with all of the provisions of their code. The proposed plan of the textile unions to set up a sliding scale of minimum wages with craft differentials was denied by the code authorities. In addition, reports that cotton textile manufacturers were not complying with the code caused a great deal of dissatisfaction and was an important cause of the nationwide textile strike called by the United Textile Workers of America in 1934.

TABLE 36[a]

NUMBER OF COTTON TEXTILE ESTABLISHMENTS, SPINDLES IN PLACE, AND AVERAGE NUMBER OF WAGE-EARNERS IN COTTON TEXTILES, NEW BEDFORD, MASSACHUSETTS, 1932–1936

Year	Number of cotton textile establishments	Spindles in place	Average number of wage-earners in cotton textiles
1932	42	1,975,406	11,719
1933	35	1,916,190	17,027
1934	36	1,821,115	18,003
1935	30	1,449,983	13,091
1936	30	1,342,399	12,685

[a] *Annual Census of Manufacturing*, Massachusetts Department of Labor and Industries, Division of Statistics.

Manufacturers were disappointed because the cotton textile code did not eliminate overproduction. Some maintained that it had an opposite effect in the South where the cotton textile mills which previously worked up to 60 hours a week, finding

the maximum of 40 hours a week under the NRA irksome, instituted double shifts and were thus able to step up their production still further.

In February, 1935 a conference of New England cotton textile men, public officials and economists resulted in a number of proposals to equalize wage rates throughout the industry and to restrict operations to a single shift of 48 hours a week. The NRA was studying revision of the cotton textile code along these lines when its invalidation by the Supreme Court brought this phase to an end.

Dissatisfaction with the broad details of the code should not be taken to mean that New England was against the provisions of the NRA. Most of the cotton textile industry feared a return to the ruthless competition and chaos of the pre-NRA period and was thankful for the new lease on life that had been given it. Soon after the NRA was declared unconstitutional, the Massachusetts legislature asked the president of the United States to prevent undercutting of labor standards, Massachusetts congressmen sought legislation to permit interstate NRA compacts, and the committee of the cotton textile industry strove for voluntary compliance with the code provisions under which Massachusetts cotton textile mills continued to operate. But with the exit of the NRA the labor cost differential in favor of the South again widened and the year 1935 marked the resumption of wholesale liquidation of New Bedford cotton textile mills.

If there were any doubts left as to the fact that it was southern competition, and more particularly, the labor cost differential that lay at the bottom of the decline in the New England cotton textile industry, they were dissipated by the experience with the NRA. From this time on the New England area became a staunch supporter of Federal wage and hour legislation, and it has been fighting for such legislation ever since. This fight has not been entirely unsuccessful, as can be seen from the fact that the year 1938 witnessed the passage of the Fair Labor Standards Act, popularly known as the "Wages

and Hours Act." Effective October 24, 1938, this act set a minimum wage of 25 cents per hour and a maximum of working hours of 44 hours a week for industries in interstate commerce which includes, of course, the cotton textile industry.

Although the act permits regional differentials in minimum wage rates, the Administrator of the Fair Labor Standards Act (upon recommendation by the industry committee for cotton textiles) set a single minimum of 32½ cents per hour for the whole country, North and South, on October 24, 1939.

The reactions to this decision in both regions (New England and the South) are good indicators of the fact that each clearly saw the importance of the labor cost differential. New England hailed the decision which placed the North and South on the same competitive wage basis. The southern mill men protested the decision, insisting that they could not pay such a high minimum, and arguing that living costs were lower in the South.

On April 2, 1940 the Fifth United States Circuit Court of Appeals, sitting at New Orleans, rejected the appeal of the southern companies and upheld the 32½ cents flat minimum wage.

Every group in New Bedford greeted this decision with enthusiasm. The decision, the New Bedford *Standard-Times*, wrote " is naturally gratifying to manufacturers and workers in this city." [1]

" It is the best piece of news I've seen in a long time," said William Baron, president of the Weaver's Union and president of the New Bedford Textile Council. In this opinion he was joined by Mr. Batty, secretary of the Loomfixers' Union and secretary of the Textile Council, Seabury Stanton, executive head of the Hathaway Manufacturing Company, and William B. Gardner, president of the Nashawena Mills. All pointed to the fact that a most important step toward ironing out the labor cost differential had at last been taken.

Final action came when, in February, 1941, the United States Supreme Court confirmed the lower court's findings. Since the

1 Issue of April 3, 1940.

flat minimum wage was upheld by the highest court those mills now still operating in New Bedford will be in a much better competitive position. Unfortunately, the decision cannot bring back those mills which have already liquidated, whose machinery was sold at auction, and whose buildings have already been torn down.

Loans to Industry

The Federal Reconstruction Finance Corporation which was empowered to make loans to industry, also aided the New Bedford cotton textile industry. Of the first three cotton textile mills to receive such loans from the RFC, two were located in New Bedford.

In May, 1934 the Taber Mill received a loan amounting to $247,500 on its real estate, buildings, equipment and all fixed assets. Originally incorporated in 1905, the Taber Mill had not had a very favorable record throughout its history, although it paid good dividends along with the rest of the mills during the war years. By 1928, the Taber stock had fallen to 50% of its par value. The company was in difficult financial straits on account of the poor cotton textile market, the long strike and the failure of its attempt to expand outside of New Bedford by purchasing the Corr Mills in East Taunton, Massachusetts, a community that virtually became a "ghost town." The Corr property cost the Taber Mill more than a quarter of a million dollars.

Deficits continued to grow and in 1935 the Taber Mill was granted an additional loan of $100,000 by the RFC. By this time the East Taunton plant had ceased operating and had been taken over by the city for unpaid taxes. Unable to bear its heavy financial load any longer the mill closed in 1936 and its assets were taken over by the RFC, its largest creditor.

Voluntary committees made many attempts to save the Taber Mill. As late as January, 1940 funds were still being sought to run this mill and an announcement was made that all that was needed was $100,000 for working capital. Prominent in the

efforts to start this mill running again were the cotton textile employees of New Bedford, who have given large sums of money a number of times in order to preserve their industry. In this case they pledged one-half of the needed sum ($50,000). Unfortunately, the remainder could not be secured. In April, 1940 a Federal judge at Boston ordered that the Taber Mill liquidate.

Another mill, the Booth Manufacturing Company, also received a loan from the RFC of $300,000, to be used for working capital in the mill's attempt to expand into the production of rayon goods. A large part of this money was used to install rayon warpers and winding equipment of the latest type and 500 Crompton and Knowles semi-silk looms suitable for weaving rayon fabrics.

Continued losses were suffered by this mill, however, and in February, 1938 the RFC ordered the mill closed. Eventually, a number of new industries were housed in the mill's buildings.

In the case of the Dartmouth Manufacturing Company, however, a loan by RFC proved more successful. There were a number of other contributing factors which helped save that company but the loan was the most important. In the final analysis, of course, it was improbable that the extension of temporary loans could overcome the basic causes which were driving these mills to the wall. That in most cases these attempts were unsuccessful is another indication of the power of the fundamental economic forces in the city's decline.

The Role of New Bedford Labor

Although of very great importance to New England and to New Bedford, the national legislation that has just been discussed did not have as its primary objective the amelioration of conditions in that area. Measures taken by the state of Massachusetts and the city of New Bedford itself, however, were aimed directly at preserving native industry and bringing in new establishments.

Since it had within its boundaries so many cities severely depressed, it is to be expected that the state of Massachusetts would take a keen interest in assisting the depressed industries. One of the most important steps taken was in lightening the burden of taxes.[2] In addition, the state legislature has set up a number of special investigating committees which have done valuable exploratory work in analyzing the causes of the depression and making recommendations for appropriate action. Changes in taxation by the state arose out of recommendations by one of these legislative committees.

Again, in 1936, the State Department of Labor and Industries asked that anyone learning of a contemplated removal of some plant in any city notify the department. It was hoped that the State Board of Conciliation and Arbitration might offer its services to forestall such removals by meeting the inducements offered by some out-of-state communities or enlisting the cooperation of the employees affected and the local authorities.

The only modification in the state's social legislation policy, occurred in 1934. In that year and every year thereafter, the state legislature has suspended the so-called "six o'clock law" which prohibits women from working from 6 p. m. to 6 a. m. Women could now work up to 10 p. m., giving the manufacturer greater freedom and flexibility in arranging working shifts to obtain maximum operating efficiency.

The very fact that labor organizations, both in New Bedford and other cities, abandoned their previous insistence that the "six o'clock law" be maintained is very significant, for it pointed to a new and important phase in the role of labor. Textile labor organizations, weakened by the 1928 strike and steadily shrinking job opportunities, became less and less effective in resisting wage cuts. The chief point at issue came to be the preservation of jobs, rather than a maintenance or elevation of the wage rate. Willingness on the part of labor

2 See the last section of this chapter.

to accept lower wages and lower standards of working conditions, requested by the mill men, became a reality.

In 1938 for example, the Textile Council signed an agreement with the manufacturer's association outlawing all strikes except those called to enforce an arbitration award. The year before this the Textile Council had negotiated a 12½% wage reduction for New Bedford cotton textile mill employees without the consent of the parent national organization, the United Textile Workers of America. This action resulted in its suspension and final withdrawal from the national union altogether.

New Bedford labor played still another part in the attempt to save the city's cotton textile mills. On a number of occasions labor offered direct financial assistance to companies. This action is perhaps best illustrated by what happened in the case of the Neild Mill, whose president, John Neild, was one of the best-liked " bosses " in the New Bedford area.

The Neild Mill was not only known as a good place in which to work, but also as a very good investment. The mill started operations in 1911 and paid its first dividend in 1913. In the 14 years from 1913 to 1926 inclusive, stockholders received a total of almost two million dollars on an investment of $800,000. An idea of this mill's prosperity can be gained by noting that in 1922, for example, stockholders not only received their regular 8 percent dividend plus extra dividends of 32 percent, but also received a 50 percent stock dividend at the end of the year.

However, like other formerly prosperous cotton textile mills of New Bedford, the Neild Mill found itself in poor financial straits during the depression. Besides owing money to the banks, the firm had also incurred heavy indebtedness by buying a large amount of new machinery in 1936 in the hope of eventually cutting down production costs. In November, 1937 it filed a petition in Federal Court to reorganize under Section 77-B of the Bankruptcy Act, a move which caused consternation among mill employees in the north end of the city, who had come to regard the Neild Mill as a permanent institution.

The Neild Mill, however, was not going to be lost without a fight, a fight in which to a very large extent, its employees participated. On December 29, 1937 there appeared in the New Bedford *Standard-Times* the following advertisement:

NEILD MILL WORKERS
(employed and temporarily unemployed)
Special Meeting
Westinghouse A. C. Hall—Corner Nash Road and Acushnet Avenue
Wed. 12: Noon—second shift workers
Wed. 1:30 p. m.—first shift workers
Business: Save the Neild Mill and Your Jobs
Sponsored by the New Bedford Textile Council

Practically every Neild Mill employee came to this meeting at which Mr. Batty, secretary of the Textile Council, outlined a plan to save their mill and their jobs. Simply stated, the plan involved an agreement on the part of the workers to take a 10 percent deduction from their weekly wages, the money to go into a fund to pay the company's creditors. Said Mr. Batty:

I don't know how long you may have to pay this ten percent; perhaps a year; perhaps a year and a half or two years, depending on business . . . I know it is not easy to get along on your present wages, but in an emergency of this kind you must choose between two evils. . . . Nobody can guarantee the experiment will be successful. All we suggest to you is that you give your mill a chance to come back.[3]

This plan was quickly adopted. As it was put before them, the employees could choose between losing their jobs or working for 10 percent less than they had previously received, and they adopted the latter alternative.

This action on the part of the New Bedford labor was widely applauded as another piece of evidence that a "spirit of co-operation" still prevailed:

3 New Bedford *Standard-Times*, December 30, 1937.

> . . . The workers deserve warm commendation for the cooperative spirit which they display. . . . Labor now proposes to join hands with capital in the attempt to save the company from liquidation.[4]
>
> The action of the Neild Mill workers . . . in offering to contribute part of their earnings each week to raise necessary additional capital for the corporation will go far in establishing the reputation of New Bedford textile workers as cooperative with the industry and will set an example which may prove of large importance to the industry and to this community.[5]

One group did voice opposition to this plan. This group, which favored industrial-versus-craft unionism and was not represented on the New Bedford Textile Council, pointed to the fact that none of the banks or the investment houses or even the Neild Mill stockholders were willing to lend or invest any additional funds in the enterprise because they had lost confidence in the eventual rehabilitation of the company. For the workers to contribute anything, the argument went, would be throwing good money after bad.

As it turned out, this opposition group was correct. In March, 1938 the Neild Mill closed. It proved impossible to secure an RFC loan and no one else was willing to contribute any money to help run the mill. The machinery was auctioned off and the building taken over by the Soule Mills whose property had been damaged by fire.

The efforts of the workers to save their jobs at the Neild Mill was not the only example of employee participation in the general program of preserving old industry. Their efforts also came to naught in the reorganizations of both the Taber and Booth Mills. The only instance of success was the case of the Dartmouth Manufacturing Company, reorganized as the Naushon Company. Here everyone took a part in lending a helping hand. The Reconstruction Finance Corporation extended a loan of $370,000; additional capital was invested

4 From the Boston *Herald*, quoted in New Bedford *Mercury*, Jan. 1, 1938.

5 A. A. Talmadge in New Bedford Sunday *Standard-Times*, Jan. 2, 1938.

by a firm of New York City textile factors; the city of New Bedford granted an abatement of taxes amounting to $205,000; and the employees subscribed $150,000, deducted from their wages at the rate of 5% of each week's wages of $18 or more, in return for preferred stock.

Financial assistance to industry on the part of New Bedford labor could never be very successful, if only because of the fact that it could never amount to very much in terms of dollars. Small groups of employees, unaided, could not hope to overcome the overwhelming force of the depression.

Taxation

Practically every organization set up in an attempt to bring back prosperity to New Bedford united in a drive to lessen the tax burden upon industry. Such a program, they argued, would not only remove an important burden upon the tottering cotton textile mills, but would also attract new industry into the city.

TABLE 37 [a]

Abatements Granted to New Bedford Cotton Textile Mills, 1929–1938

Year	Abatements granted on	
	Real estate	Personalty
1929	$ 37,610	$ 82,710
1930	18,198	61,513
1931	34,279	23,252
1932	47,748	42,683
1933	119,420	52,413
1934	83,264	41,165
1935	109,894	114,940
1936	151,965	[b]
1937	119,697	[b]
1938	168,992	[b]

[a] Office of the City Treasurer, New Bedford, Massachusetts.
[b] No tax on personalty at this time.

The city cooperated fully. Expenditures were reduced as far as possible and large sums were raised by borrowing. Despite

these efforts the tax rate kept increasing. Obligatory increases in expenditures (e. g., for home relief), reduced revenues because of large tax delinquencies, and the large abatements or discounts that the city gave to the mills on their tax bills forced the city to increase the tax rate in the hope of obtaining additional revenue.

The problem faced by New Bedford in attempting to save its industry through reductions in taxation can be clearly explained by considering the question of abatements. Throughout the period of depression the cotton textile mills continually requested that part of their year's tax bill be abated. They were in a serious financial position and abatement of part of their taxes would be a great help. In most cases (although there was a good deal of litigation over the question) the city granted abatements amounting to sizeable sums. That the granting of these abatements was tied up with an attempt to ward off increased unemployment can be judged from the following statement by the Mayor of New Bedford: " In many instances they (abatements) are granted only after receipt of a guarantee that the corporation applying will employ a certain quota of workers for a definite period." [6]

The extension of abatements, however, cut heavily into the city's finances. As a result, the tax rate had to be raised in order to provide additional revenue. The cotton textile mills were therefore obtaining tax relief in the form of abatements, while facing an increased tax burden because of the rising tax rate.

Eventually, city finances reached a stage where the state had to step in with special legislation enabling New Bedford to borrow additional funds. At the same time a large measure of control over the city's finances passed to the state.[7]

6 See New Bedford *Standard-Times*, July 22, 1938.

7 See The New Bedford tax abatement Funding Bill, approved August, 1939. Under the terms of this bill no appropriation for any purpose can be voted without approval of the state Emergency Finance Board and the maximum amount that may be expended in each year for any municipal purpose can be fixed by the Board. This control will last until 1946.

The state, acting under recommendation of a special legislative committee [8] also made a drastic change in the taxation of machinery used in manufacturing. Before 1936, machinery of manufacturing corporations (particularly the spindles and looms of the cotton textile mills in New Bedford) was subject to taxation by the city as personal property. Under the change effected in 1936, machinery was exempted from local taxation. Instead, the state imposed a tax of $5 per $1,000 worth of machinery. Since the general tax rate was as high as $48 per $1,000 in New Bedford, it can be seen that the savings so effected were substantial. Localities are to be reimbursed for the loss of revenue entailed by a redistribution of certain taxes by the state.

It was hoped that the exemption of machinery of manufacturing corporations from local taxation might both retain industry and induce new factories to locate within the state. That this was the fundamental idea behind the change is obvious from the following statement by the Special Commission:

> The effect of such action (exemption of machinery from local taxation) undoubtedly will be to retain within the State the factories now operating, the possible reopening of factories now closed, and the attracting of new industries to locations within our borders.
>
> The Commission is strongly of the opinion that the legislation herein proposed, if adopted by the Legislature, will be the greatest incentive to a "revival of manufacturing" which is so necessary to the prosperity of Massachusetts.[9]

The efficacy of such measures in keeping and attracting industry has frequently been criticized by tax experts.[10] In New

8 Commonwealth of Massachusetts, Report of the Special Commission Relative to the Taxation of Tangible and Intangible Property and Certain Related Matters. House, No. 413, January, 1936.

9 Commonwealth of Massachusetts Report of the Special Commission Relative to the Taxation of Tangible and Intangible Property and Certain Related Matters, House, No. 413, page 6, January, 1936.

10 See e. g., *Bulletin* of the University of Illinois, Bureau of Business Research, Vol. XXXV, No. 58, 1938, pp. 45-46. "The Tax System and Industrial Development" by G. H. Steiner.

Bedford, however, there was not much difference of opinion. The prevailing judgment, not only of the manufacturing companies involved, but also of other business men, labor leaders, newspapers, and city officials was in favor of anything which would reduce the burdens on industry.

As is true with most of the other measures taken to preserve old industry and attract new factories, the results of this change in taxation are not as yet calculable. So far, however, the results have been negative. The burden of taxation usually plays a very small part in the total costs of production and the role of tax reductions has probably been greatly exaggerated. The experience of the New Bedford cotton textile mills supports this conclusion. Both the Taber and Neild mills were making desperate efforts to continue operations and both recevied heavy abatements in taxes and enjoyed the benefits of the change in machinery taxation. Nevertheless, both are now gone.[11]

The tremendous decrease in spindleage in the decade of the 'thirties, the unemployment of thousands of mill employees, and the failure of one cotton mill after another provide eloquent testimony that the attempts to save New Bedford's cotton textile industry had little success (see Figure 10). Five more cotton mills have failed since 1937 and these closings are indicative of the fact that New Bedford, instead of holding its own in cotton textiles was continuing to lose ground.

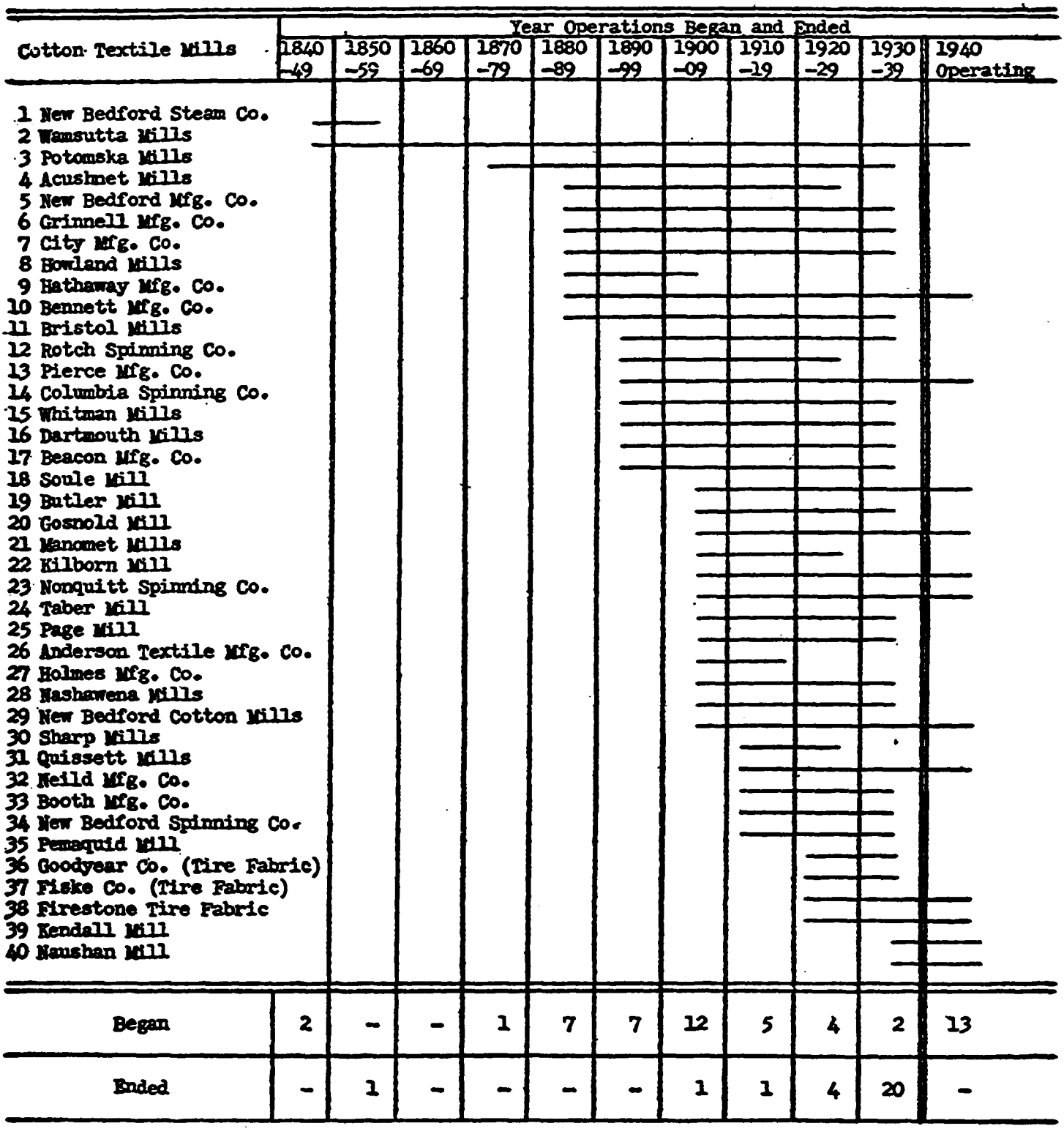
The cotton mills still operating in the city are, comparatively speaking, the most efficient. The fine goods they produce make New Bedford's proximity to the New York style center a very important consideration. Another advantage arising from the production of fine goods is the fact that the wage differential in that branch is smaller than for the entire industry. In April, 1937 the ratio of hourly earnings in New England to those in the South was about 119 in the fine goods weaving branch and 128 for the industry as a whole.[12]

11 For a more detailed discussion of the collapse in New Bedford's finances see "The Public Finances of a One-Industry City" by Seymour L. Wolfbein in *Bulletin* of the National Tax Association, May, 1941.

12 *Monthly Labor Review*, April, 1938.

Fig.10

THE LIFE SPAN OF INDIVIDUAL COTTON TEXTILE MILLS
New Bedford, Mass.



	1840 -49	1850 -59	1860 -69	1870 -79	1880 -89	1890 -99	1900 -09	1910 -19	1920 -29	1930 -39	1940 Operating
Began	2	-	-	1	7	7	12	5	4	2	13
Ended	-	1	-	-	-	-	1	1	4	20	-

There is no reason to believe, however, that there will—in the near future—be any reversal in the inter-regional shift which has carried the cotton textile industry to the South. With the great bulk of the industry already located in the South, it would take a complete turn-about in the present competitive setup to effect such a change. There seems to be little evidence that such a reversal is at hand.

Migration

By 1940, after a decade of severe depression, New Bedford had failed to find a new means of livelihood to replace the employment opportunities afforded by the cotton textile industry. Failing to find work at home, the population in New Bedford had the alternative of moving out of the city to areas where job opportunities were more plentiful. Here again, however, they faced the obstacle presented by the general depression which prevailed throughout the country. In addition to the barriers to migration in the form of lack of funds to move, reluctance to break home ties, training for specific skills for which the demand was localized (especially important in a one-industry city), potential migrants from New Bedford could find very few places where job opportunities were plentiful.

The effect of the general depression as a barrier to migration may be seen by comparing population changes which occurred between 1920 and 1930 with those which took place between 1930 and 1940. As can be seen from Table 38, the population of New Bedford reached its peak in 1920 when it stood at a little over 121,000 persons. The decade of the 'twenties witnessed New Bedford's first decline in total population, accompanied by a substantial migration among both males and females. Between 1920 and 1930, 18.2 per cent of the males and 13.6 percent of the females migrated from New Bedford.[13] Migration was particularly heavy among both men and women who were between 20 and 34 years of age in 1920. In fact, more than one-

13 *Internal Migration in the United States* by C. Warren Thornthwaite, University of Pennsylvania Press, 1934, p. 37, Table 15.

fifth of the men in those age groups migrated from New Bedford during that decade.[14]

TABLE 38

POPULATION OF NEW BEDFORD, MASSACHUSETTS, 1870–1940[a]

Year	Population	Percent Change
1870	21,320	
1880	26,845	+26
1890	40,733	+52
1900	62,442	+35
1910	96,652	+55
1920	121,217	+25
1930	112,597	— 7
1940	110,341	— 2

[a] Bureau of the Census, U. S. Department of Commerce.

During the 'thirties however, migration was comparatively small. Only among persons aged 15-19 years in 1930, i. e. those who reached working age during the past decade, was migration as high as ten percent. Migration was heavier among the women, who formed a large part of the cotton textile industry's labor force, than among the men.

The effect of the general depression in slowing down migration, therefore, is evident from the population data presented in Table 39. The decade of the 'twenties, which was prosperous for New Bedford in contrast with its experience during the next ten years, actually witnessed a heavier migration than that which occurred between 1930 and 1940 when the country-wide depression presented a formidable barrier to movement out of the city.

Thus, by the end of the 1930's, New Bedford had failed in the three major projects which might have served to ease the severe depression in the city. It was unable to halt the steady decline in the number of cotton textile mills; it had relatively minor success in attracting new industry; and its population was hampered by the general depression in any attempt it may

14 *Ibid.*

have made to migrate. The high incidence and the long duration of unemployment in New Bedford were the results.

TABLE 39

AGE DISTRIBUTION OF EMIGRANTS FROM NEW BEDFORD, 1930–1940

Age in 1930	Males			Females		
	Population 1930	Emigration 1930-1940 [a]	Percent Emigration	Population 1930	Emigration 1930-1940 [a]	Percent Emigration
0-4	4,655	194	4.2	4,399	163	3.7
5-9	5,554	97	1.7	5,490	107	1.9
10-14	5,348	193	3.6	5,407	293	5.4
15-19	5,038	406	8.1	5,202	543	10.4
20-24	3,962	141	3.6	4,783	439	9.2
25-29	3,826	38	1.0	4,584	314	6.8
30-34	4,025	127	3.2	4,639	204	4.4
35-39	4,372	22 [b]	.5	4,717	131	2.8
40-44	3,953	161	4.1	4,276	133	3.1
45-49	3,505	46	1.3	3,645	140	3.8
50-54	2,932	94	3.2	3,134	180	5.7
55-59	2,318	53	2.3	2,534	147	5.8
60-64	1,826	28	1.5	2,075	126	6.1
65 and over	2,778	0	—	3,531	38 [b]	1.1
Totals	54,091	1,556	2.9	58,460	2,882	4.9

[a] Estimated by applying United States survival rates for whites and non-whites for five-year age groups to the 1930 population and comparing with actual population in those age groups in 1940.

[b] Net increase.

APPENDICES

APPENDIX A

The Rodman Diary

1845

July 2 Gave most of the forenoon to the object of the steam mill in conference with Cornelius Tomkins of Warren whom we had invited to consult upon converting it to cotton manufacture.

The decision is made to turn to cotton manufacturing,

July 25 Attended to my concerns at the c'g house, the subject of coverting the steam mill into a cotton man'y having been the subject of anxious consideration.

Aug. 24 En'g party at C. W. Morgan's to get his advice on the propriety of converting the steam mill into a cotton man'y, which was favorable to the project.

Sept. 11 ... The afternoon was spent in making or completing a contract with Dean and Morse for the cotton machinery of the steam mill. We found that the amount of the machinery and the time when they would bind themselves to complete it was much greater than I anticipated, which made the undertaking look more formidable than I had imagined though it always was viewed by me with anxiety.

and arrangements are made for obtaining the cotton machinery.

1846

Feb. 6 Edmund returned from Boston and bro't to me the act incorp'g the cotton mill.

Mar. 20 Went early to the counting house to prepare for the meeting of the Steam Mill C'y which was to meet at ten o'clock A. M. All were present except Geo. A. Bourne and the adoption of the charter was voted, the code of by laws which was presented to the m'g was accepted and the organization of the company was made by the appointment of George Hussey as President, myself Treasurer, and the other members with the excep-

The articles of incorporation are received and the organization of the company is set up.

tion of Wm. R. Rotch who declined being one were made a Board of Directors.

Apr. 18 We have rec'd twenty-two cards and thirteen coilers for the cotton man'y from Taunton this week. The heavy payments now coming due at this juncture of com'l uncertainty and distrust on account of the maladministration of the Government gave me great anxiety.

June 9 I had a call from Benj. S. Rotch now of the Boston firm of Almy Patterson & Co., with reference to the agency of our man'y as sellers of the goods and to aiding us in our finances.

Final arrangements are made for the machinery, a selling agent is contacted and the labor force recruited.

Sept. 15 Engaged at the factory premises through the day and till midnight writing letters and making calculations for the weight of the cloth which we propose to make.

Oct. 24 The preparation at the factory for commencing work in a small way on second day next took up nearly all my time through the day and ev'g. Wm. Daval was here to start the speeders today.

Oct. 29 Devoted most of the day to factory cares, endeavoring to complete some arrangements preparatory to introducing some female operatives into the mill tomorrow.

Nov. 4 Operations at the factory have commenced pretty satisfactorily but it will be some weeks before all parts will be in successful action.

Operations begin

1847

Jan. 22 On the arrival of the cars I had a call from Thurston and Greene of Providence who came at my request to see the deficiency of our steam engine for the work we have to do and to devise the best mode of increasing the power.

The company immediately finds deficiencies in the machinery and is faced with labor trouble,

Feb. 10 There has been some dissatisfaction among the operatives in the weaving room which threatens to be serious, several having left and others liable to leave. They do

not like the overseer, but the grounds of the dislike do not seem to warrant any immediate change.

Feb. 11 The rather formidable combination which yesterday threatened to vacate our weaving room, by the task of the superintendent and the discharge of a few of the instigators appears to be at an end.

while additional capital is sought as business conditions become bad.

Apr. 14 Remained at home til after breakfast and then went on a disagreeable mission to see if I could by an exhibition of my statements induce some of the prominent men of our town to take an interest in the cotton mill. I called on James Arnold's, on E. M. Robinson, Thomas Mandell, etc., but I had no positive success. Two or three spoke somewhat encouraging, but in fact offered but a slender hope. Thus the proposal for meeting heavy liabilities by gaining new colleagues to the enterprise is very faint.

Apr. 16 I saw Jos. Grennell today, but he says he is pledged to another company for cotton manufacturing now getting up, so that I have no hope from this quarter.

Trouble with the labor force continues, with attempts at unionization and indications of a strike

July 6 Found on going to the factory the hands were displeased at the somewhat reduced wages and therefore the work today has been but inconsiderable. Numerous other objects about the factory and machinery taxed our attention and vigilance fully.

July 9 Some trouble with the girls at the factory today on account of the wages. Six of them left. A. G. Snell and I talked kindly to them, showed that wages paid here were still higher than in most establishments, and that the reduction was on our part the result of necessity and not of choice.

July 13 There is some trouble at the factory with the weavers, indicating dissastisfaction with the price per cut. On the whole things look very discouraging there.

July 14 Did not go to the c'g house before breakfast, but found after getting there the weavers had left the factory with a few exceptions, they demanding thirty cents per cut instead of twenty-eight. Conferred with some of the stockholders who united in the opinion that we should not yield to their demand and measures were taken to obtain others if they should hold out, but in the afternoon I was glad to learn they had returned on learning from the superintendent that no more would be paid.

Dec. 9 Another important change in the management of the concern was voted to accept A. G. Snell's offer to run the mill and pay all expenses and have three cents a yard to cover expenses and repairs of machinery. This, if it can be carried out, will very much lighten the duties and responsibilities of the Treas'r. The leading inducement was to raise the credit of the company, now depressed in public estimation, by being able to show in a simple and intelligible form that something can be made by the mill, even in these dull times.

and in the face of a general business depression, the organization of the mill is changed

1848

Mar. 23 Went to the factory, which is started again today after a suspension of two weeks to replace new gear wheels for broken ones. So unfavorable are the prospects for the cotton business that it is uncertain whether it is better to run the machinery or not.

Continued breakdowns in the machinery disturb production

Apr. 22 Again I have been very closely occupied with calculations and investigations relating to our consignment of goods to our Boston friends, who have had very poor success in disposing our fabrics, which have hitherto been confined to their agency, but we have now made them acquainted with the imperative necessity which will hereafter oblige us to avail more directly of other markets.

and there is dissatisfaction with the operations of the selling agent.

Aug. 2 Went to the c'g house before breakfast and was disappointed to learn that the cotton which we have been expecting at the factory and for want of which some of the machinery was stopped yesterday had not arrived. At my return to the store after breakfast I was glad to find the vessel with the cotton at the wharf, but there was a greater disappointment in the bad and damaged quality in which three out of the four first bales were found to be.

To cap matters, there is difficulty with the raw material—cotton,

Sept. 9 Had calls from Wm. Almy and B. S. Rotch who informed us that they had sold all of the goods which they had in the brown state at the minimum price of 6½c. and a disc't from that on the large sales. With more judgement and self reliance they would have obtained 33⅓% more for them.

the goods are sold at a very disappointingly low price,

Nov. 8 Occupied with reference to factory business through the day and ev'g, the mill running again after stopping two days for the breaking of one of the main gear wheels.

the machinery breaks down again,

1849

Jan. 30 The weavers at the factory struck work today to dictate the rules with which they shall be governed in work and pay.

Mar. 12 A. G. Snell arrived home from New York, having executed his mission very opportunely having brought one hundred fifty bales of cotton about two hours before the steamer at Boston was telegraphed which caused an advance of one half cent in the price.

Sept. 27 Occupied before breakfast and through the forenoon by my pressing c'g house duties, chiefly in connection with David Whitman who came at my request though Z. Allen to aid us with advice about our cotton mill. He is quite at home on these subjects and I hope that he may be able to strike out some changes of machinery and style of goods which may aid us.

Attempts to better the situation through improvements in machinery and the finished product are made,

1850

Apr. 28 I am advised by George Hussey, now in New York, that he has bought 186 bales of cotton which he thought it expedient to do in anticipation of a further rise in price and A. G. Snell has gone to Boston this afternoon with a view of buying further if the state of the market will warrant it.

while direct operations in the raw cotton market are engaged in to preclude losses arising from fluctuations in cotton prices,

Sept. 28 Had a meeting of a number of the Steam Mill Co. in the library in the ev'g to consider on the course to be pursued whether to stop or not, on account of the very bad times. Found the choice of the alternative two evils too perplexing for immediate decision.

but business is still bad.

Nov. 9 A. G. Snell was here in the ev'g. He found no encouragement in Boston to attempt to buy cotton to run the mill. To stop seems the only alternative unless the help will submit to a reduction of wages of twenty-five percent.

After a great deal of thought on the matter,

Nov. 25 Brother Benj'n called and informed me that all the cotton mills at Fall River except Andrew Robeson's were stopped in consequence of the refusal of the spinners to submit to a reduction of wages.

1851

Apr. 29 Occupied forenoon in writing to England to my nephew A. Robeson, Jr. for information of the most approved steam engine for such a cotton mill as ours, to be able to judge of the expediency of a change in this part of our arrangement.

June 3 A. G. Snell was here in the ev'g to state his discouragements as to continuing to run the mill on his own account.

the decision is made to discontinue operations and auction off the mill,

Aug. 30 Occupied til ev'g in preparing for a meeting of the directors of the Steam Mill Company to decide on measures to be taken with reference to the sale of the mill.

Sept. 1 George Hussey called in the morning relative to the instructions to the auctioneer, Josiah B. King, for the government of the sale of the Steam Mill at

but there are no takers.

eleven o'clock. G. H. called again at noon and informed me that there was not a bid except the twenty thousand dollars offered by A. G. Snell to start the movement and it was struck off to him at that, so that it now belongs to the four directors, a suprising result notwithstanding the present depression in the manufacturing business.

Oct. 11 Wrote a letter to G. P. Swift relative to the removal of our cotton machinery south...

Nov. 20 Brother William was in and we conversed about... the not encouraging account from A. G. Snell as to getting the co-operation of southern capital to remove our mill to Georgia on the splendid water privilege which can be had on such very favorable terms.

The attempt is made to move to the South but it is unsuccessful

1852

Feb. 12 Had a call from A. G. Snell. He returned yesterday from the Shaker settlement at Shirley where he attempted to introduce our machinery into their mills, but found no encouragement.

Feb. 16 A. G. Snell was here and reported his most recent visit to the Shakers at Shirley which does not look likely to lead to any disposition of our idle machinery.

Mar. 1 Went to . . . George Hussey's counting house to decide in regard to the plan of transferring our idle cotton machinery to the Shakers' mill at Shirley, which was finally decided upon, the old or present owners holding one-half and to be to that extent interested in the lease of the Shakers' mill.

and part of the idle machinery is transferred to another mill,

Aug. 25 Had an interview with Mr. Coe of Little Compton relative to the sale of the Steam Mill premises...

while arrangements are made to dispose of the remaining properties.

Nov. 16 Spent the day in looking through the mill and over the premises (at Shirley). The only thing now lacking for moving the machinery to profit appears to be good and skillful operatives in the various departments and I fear it will take some months to supply this deficiency.

Nov. 25 Rode five miles into the country to see a man with reference to employment at the factory at Shirley.

Nov. 27 I called at the Rev. Mr. Thomas's to enquire respecting a Scotch woman who is said to be a good weaver.

[Samuel Rodman continued to be interested in a number of cotton mills and continued to face many of the same problems described above.]

APPENDIX B

Supplementary Tables

TABLE I

Capital Invested in Cotton Textile Manufacturing in New Bedford, Mass., 1907–1938

Year	Capital Invested in: Cotton Manufacturing (000)	Capital Invested in: All Manufacturing (000)	Percent of Capital Invested in Cotton Manufacturing
1907	$ 33,427	$ 36,763	91
1908	40,278	43,681	92
1909	50,310	58,970	85
1910	60,368	67,986	89
1911	73,005	80,511	91
1912	76,444	84,465	91
1913	78,109	86,950	90
1914	78,230	88,244	89
1915	80,875	90,745	89
1916	90,721	102,388	89
1917	115,452	130,931	88
1918	136,967	154,814	88
1919	153,901	174,598	88
1920	151,556	177,512	85
1921			[a]
1922	154,765	175,667	88
1923			[a]
1924	143,391	166,383	86
1925			[a]
1926	135,600	165,438	82
1927			[a]
1928	116,546	141,683	82
1929			[a]
1930	98,291	127,863	77
1931			[a]
1932	73,509	96,556	76
1933			[a]
1934	66,618	91,353	73
1935			[a]
1936	48,197	78,129	62
1937			[a]
1938	33,664	63,763	53

[a] Data on capital invested obtained only on the even years since 1920.

TABLE II

Average Number of Wage-Earners Employed during the Year in Cotton Textile Manufacturing, New Bedford, Mass., 1907–1938

Year	Wage-earners in cotton manufacturing	Wage-earners in all manufacturing	Percent wage-earners in cotton manufacturing
1907	18,550	21,834	85
1908	17,992	21,028	86
1909	22,137	26,566	83
1910	22,773	27,107	84
1911	25,839	30,507	85
1912	27,196	32,031	85
1913	26,769	34,291	78
1914	28,719	33,343	86
1915	29,622	34,352	86
1916	31,398	36,873	85
1917	33,492	39,069	86
1918	34,654	40,525	86
1919	35,206	41,630	85
1920	33,708	40,622	83
1921	28,505	33,645	85
1922	31,529	36,951	85
1923	31,955	37,917	84
1924	26,593	32,510	82
1925	29,891	35,696	84
1926	29,148	35,143	83
1927	29,079	35,084	83
1928	15,825	21,249	74
1929	25,784	32,113	80
1930	20,041	25,739	78
1931	17,702	23,602	75
1932	11,719	16,456	71
1933	17,027	23,260	73
1934	18,003	24,631	73
1935	13,091	23,956	55
1936	12,685	25,821	49
1937	13,922	26,471	53
1938	7,799	18,416	42

TABLE III

Value of Product of Cotton Textile Manufactures in New Bedford, Mass., 1907–1938

Year	Value of Product of		Percent Value of Product of Cotton Manufacturng
	Cotton Manufacturing	All Manufacturing	
1907	$ 35,642	$ 42,546	84
1908	31,995	39,084	82
1909	42,497	53,238	80
1910	45,215	55,669	81
1911	44,702	56,421	79
1912	46,870	59,824	78
1913	55,389	69,466	80
1914	51,766	65,575	79
1915	54,147	69,245	78
1916	76,266	102,431	74
1917	115,081	149,597	77
1918	154,613	191,848	81
1919	177,059	210,773	84
1920	222,835	262,234	85
1921	89,775	111,203	81
1922	106,735	129,628	82
1923	120.535	149,999	80
1924	88,683	117,053	76
1925	109,589	143,586	76
1926	93,447	121,035	77
1927	93,477	125,542	74
1928	55,481	82,641	67
1929	86,195	121,696	71
1930	57,272	81,159	71
1931	42,954	63,480	68
1932	23,465	39,151	60
1933	36,245	55,677	65
1934	41,258	63,661	65
1935	33,397	69,030	48
1936	30,837	77,601	40
1937	33,565	79,392	42
1938	16,152	52,087	31

Source: *Annual Census of Manufacturing*, Massachusetts Department of Labor and Industries, Division of Statistics.

TABLE IV

INDEX (1924–26 = 100) OF AVERAGE NUMBER OF WAGE-EARNERS IN ALL MANUFACTURING IN NEW BEDFORD, MASS., AND UNITED STATES, AND IN COTTON MANUFACTURING IN NEW BEDFORD, 1907–1937

Year	New Bedford Cotton Manufacturing	New Bedford All Manufacturing	Massachusetts All Manufacturing	United States All Manufacturing
1907	65	63	91	—
1908	63	61	81	—
1909	78	71	98	—
1910	80	79	97	—
1911	91	89	98	—
1912	95	93	102	—
1913	94	100	104	—
1914	101	97	102	—
1915	104	100	100	—
1916	110	107	115	—
1917	117	113	119	—
1918	121	118	121	—
1919	123	121	120	107
1920	118	118	117	—
1921	100	98	97	83
1922	110	107	103	—
1923	112	110	109	105
1924	93	94	99	—
1925	105	104	100	100
1926	102	102	101	—
1927	102	102	97	99
1928	55	62	91	—
1929	90	93	94	105
1930	70	75	81	—
1931	62	69	73	78
1932	41	48	59	—
1933	60	68	67	72
1934	63	71	71	—
1935	46	70	75	88
1936	44	75	81	—
1937	49	77	85	102

TABLE V

INDEX (1924–26 = 100) OF AVERAGE YEARLY WAGES IN ALL MANUFACTURING IN NEW BEDFORD, MASS., AND UNITED STATES AND COTTON MANUFACTURING IN NEW BEDFORD, 1907–1937

Year	New Bedford Cotton Manufacturing	New Bedford All Manufacturing	Massachusetts All Manufacturing	United States All Manufacturing
1907	31	29	38	—
1908	29	28	34	—
1909	35	35	42	—
1910	37	36	42	—
1911	40	39	43	—
1912	44	43	46	—
1913	50	48	49	—
1914	47	46	47	—
1915	51	49	48	—
1916	62	60	62	—
1917	79	74	74	—
1918	102	97	94	—
1919	114	111	106	97
1920	141	139	123	—
1921	91	87	89	76
1922	115	101	94	—
1923	118	114	108	103
1924	96	95	98	—
1925	105	103	99	100
1926	100	99	102	—
1927	101	89	98	100
1928	55	62	93	—
1929	86	87	96	108
1930	64	68	79	—
1931	52	56	66	67
1932	29	34	46	—
1933	39	45	49	49
1934	45	53	57	—
1935	34	53	62	70
1936	36	60	71	—
1937	40	65	82	94

TABLE VI

INDEX (1924–26 = 100) OF VALUE OF PRODUCT OF ALL MANUFACTURING IN NEW BEDFORD, MASS., AND UNITED STATES AND COTTON MANUFACTURING IN NEW BEDFORD, 1907–1937

Year	New Bedford Cotton Manufacturing	New Bedford All Manufacturing	Massachusetts All Manufacturing	United States All Manufacturing
1907	61	52	63	—
1908	63	49	56	—
1909	81	62	67	—
1910	84	63	63	—
1911	87	69	68	—
1912	91	69	70	—
1913	104	79	72	—
1914	102	76	73	—
1915	108	79	74	—
1916	117	95	83	—
1917	126	101	78	—
1918	137	116	89	—
1919	141	120	87	74
1920	146	134	85	—
1921	103	90	88	73
1922	115	106	94	—
1923	117	118	106	99
1924	90	94	96	—
1925	109	110	101	100
1926	101	96	103	—
1927	106	105	105	108
1928	63	68	101	—
1929	103	96	107	121
1930	77	74	94	—
1931	70	69	89	93
1932	46	48	71	—
1933	44	67	77	79
1934	61	67	75	—
1935	51	68	79	94
1936	47	76	91	—
1937	48	73	87	116

Source: Data for New Bedford and Massachusetts from *Annual Census of Manufacturing*, Massachusetts Department of Labor and Industries. United States figures from *Biennial Census of Manufacturing*, United States Department of Commerce, Bureau of the Census. Value of product of all manufacturing adjusted for price change by Bureau of Labor Statistics Index of Wholesale Prices of all Commodities. Series on value of product of cotton manufacturing adjusted for price change by Bureau of Labor Statistics Index of Wholesale Prices of Textile Products.

TABLE VII

NUMBER (000) AND INDEX NUMBERS (1924–26 = 100) OF COTTON SPINDLES IN PLACE IN UNITED STATES, COTTON GROWING, NEW ENGLAND AND OTHER STATES, MASSACHUSETTS AND NEW BEDFORD, 1914–1938

Year Ending July 30	United States		Cotton Growing States		New England States		Other States		Massachusetts		New Bedford	
	Number	Index	Number	Index	Number	Index	Number	Index	Number	Index	Number	Index
1914	32,744	87	13,000	74	17,683	97	2,061	108	11,047	95	2,707	82
1915	32,841	87	13,265	75	17,526	96	2,050	107	10,914	94	2,711	82
1916	33,333	88	13,568	77	17,788	97	1,977	104	11,105	96	2,756	83
1917	34,222	91	14,219	81	18,001	98	2,002	105	11,280	97	3,205	97
1918	34,941	93	14,610	83	18,267	100	2,064	108	11,512	99	3,208	97
1919	35,443	94	14,986	85	18,393	101	2,064	108	11,630	100	3,217	97
1920	35,834	95	15,265	87	18,543	101	2,026	106	11,759	101	3,408	103
1921	36,618	97	15,825	90	18,734	102	2,059	108	11,811	102	3,406	103
1922	36,945	98	16,075	91	18,856	103	2,014	106	11,923	103	3,408	103
1923	37,409	99	16,459	94	18,930	104	2,020	106	11,951	103	3,385	103
1924	37,804	100	17,226	98	18,576	102	2,002	105	11,792	102	3,366	102
1925	37,929	100	17,635	100	18,333	100	1,961	103	11,597	100	3,345	101
1926	37,586	100	17,875	102	17,946	98	1,765	92	11,417	98	3,191	97
1927	36,696	97	18,169	103	16,872	92	1,655	87	10,542	91	2,791	85
1928	35,540	94	18,508	105	15,463	85	1,569	82	9,350	81	2,583	78
1929	34,820	92	18,848	107	14,549	80	1,423	75	8,587	74	2,222	67
1930	34,025	90	19,122	109	13,479	74	1,424	75	7,828	67	2,125	64
1931	32,673	86	19,108	109	12,168	67	1,397	73	6,693	58	1,690	51
1932	31,709	84	19,138	109	11,374	62	1,197	63	6,168	53	1,483	45
1933	30,893	82	19,053	108	10,810	59	1,030	54	5,865	51	1,425	43
1934	30,942	82	19,331	110	10,582	58	1,029	54	5,708	49	1,265	38
1935	30,093	80	19,340	110	9,741	53	1,012	53	5,375	46	1,085	33
1936	28,147	75	19,024	108	8,135	44	988	52	4,388	38	966	29
1937	26,982	71	18,891	107	7,172	39	919	48	4,000	34	921	28
1938	26,372	70	18,798	107	6,773	37	801	42	3,766	32	644	20

Source: Data on number of cotton spindles in place for United States, cotton growing, New England and other states and Massachusetts from United States Department of Commerce, Bureau of the Census. New Bedford data from individual mills. Index numbers calculated.

TABLE VIII

Estimated Percent of Population Dependent on 3 Types of Public Assistance, United States, Massachusetts, and New Bedford, 1933–1939

Date	Dependents on 3 Types of Public Assistance			Percent of 1930 Population Dependent on 3 Types of Public Assistance		
	United States (000)	Massachusetts	New Bedford	United States	Massachusetts	New Bedford
1933						
Jan.	13,599	418,523	11,878	11.1	9.8	10.5
Feb.	14,614	436,532	9,502	11.9	10.3	8.4
Mar.	16,104	465,798	12,195	13.1	11.0	10.8
Apr.	15,577	432,413	12,524	12.7	10.2	11.1
May	14,972	422,894	11,018	12.2	10.0	9.8
June	13,285	386,462	8,291	10.8	9.1	7.4
July	12,379	355,416	6,897	10.1	8.4	6.1
Aug.	11,916	328,233	6,092	9.7	7.7	5.4
Sept.	10,781	334,322	6,808	8.8	7.9	6.0
Oct.	10,921	337,024	5,856	8.9	7.9	5.2
Nov.	12,132	346,263	8,598	9.9	8.1	7.6
Dec.	9,726	347,467	9,037	7.9	8.2	8.0
1934						
Jan.	9,507	297,166	7,719	7.7	7.0	6.9
Feb.	9,779	294,958	5,303	8.0	6.9	4.7
Mar.	11,425	315,948	5,528	9.3	7.4	4.9
Apr.	14,186	524,334	13,730	11.6	12.3	12.2
May	14,094	505,377	12,804	11.5	11.9	11.4
June	13,736	516,148	13,476	11.2	12.1	12.0
July	14,037	525,111	14,332	11.4	12.4	12.7
Aug.	14,741	526,843	14,037	12.0	12.4	12.5
Sept.	14,858	558,072	14,801	12.1	13.1	13.1
Oct.	14,966	574,035	13,970	12.2	13.5	12.4
Nov.	15,546	585,531	14,494	12.7	13.8	12.9
Dec.	16,357	623,688	14,413	13.3	14.7	12.8
1935						
Jan.	16,975	640,596	15,177	13.8	15.1	13.5
Feb.	16,839	651,419	16,040	13.7	15.3	14.2
Mar.	16,573	664,277	15,782	13.5	15.6	14.0
Apr.	16,078	651,184	16,240	13.1	15.3	14.4
May	15,546	656,245	16,926	12.7	15.4	15.0

TABLE VIII—*Continued*

ESTIMATED PERCENT OF POPULATION DEPENDENT ON 3 TYPES OF PUBLIC ASSISTANCE, UNITED STATES, MASSACHUSETTS, AND NEW BEDFORD, 1933–1939

Date	Dependents on 3 Types of Public Assistance			Percent of 1930 Population Dependent on 3 Types of Public Assistance		
	United States (000)	Massachusetts	New Bedford	United States	Massachusetts	New Bedford
1935						
June	14,579	633,341	17,313	11.9	14.9	15.4
July	14,049	625,720	16,055	11.4	14.7	14.3
Aug.	13,552	609,777	15,963	11.0	14.3	14.2
Sept.	15,660	583,105	15,627	12.8	13.7	13.9
Oct.	11,865	549,430	14,941	9.7	12.9	13.3
Nov.	19,906	892,909	15,358	16.2	21.0	13.6
Dec.	18,174	799,896	17,845	14.8	18.8	15.8
1936						
Jan.	17,673	757,419	17,627	14.4	17.8	15.7
Feb.	17,677	744,853	18,472	14.4	17.5	16.4
Mar.	16,656	739,639	17,886	13.6	17.4	15.9
Apr.	14,737	705,278	17,196	12.0	16.6	15.3
May	13,602	651,544	17,196	11.1	15.3	15.3
June	12,956	608,041	14,904	10.6	14.3	13.2
July	13,439	606,473	15,803	10.9	14.3	14.0
Aug.	13,849	590,554	16,208	11.3	13.9	14.4
Sept.	14,190	618,875	16,102	11.6	14.6	14.3
Oct.	14,566	635,088	16,467	11.9	12.6	14.6
Nov.	14,308	642,582	16,213	11.7	15.1	14.4
Dec.	13,547	613,177	15,992	11.0	14.1	14.2
1937						
Jan.	14,056	616,982	16,139	11.4	14.5	14.3
Feb.	14,305	614,617	15,832	11.7	14.5	14.1
Mar.	14,160	606,067	15,019	11.5	14.3	13.4
Apr.	13,691	585,680	14,512	11.2	13.8	12.9
May	12,929	565,742	14,448	10.5	13.3	12.8
June	11,808	513,331	14,513	9.6	12.1	12.9
July	11,103	468,967	14,963	9.0	11.0	13.3
Aug.	10,847	479,075	15,224	8.8	11.3	13.5
Sept.	10,763	485,934	15,265	8.8	11.4	13.6
Oct.	10,936	494,924	16,150	8.9	11.6	14.3
Nov.	11,452	535,042	16,761	9.3	12.6	14.9
Dec.	12,883	622,844	20,088	10.5	14.7	17.8

TABLE VIII—*Concluded*

ESTIMATED PERCENT OF POPULATION DEPENDENT ON 3 TYPES OF PUBLIC ASSISTANCE, UNITED STATES, MASSACHUSETTS, AND NEW BEDFORD, 1933–1939

Date	Dependents on 3 Types of Public Assistance			Percent of 1930 Population Dependent on 3 Types of Public Assistance		
	United States (000)	Massachusetts	New Bedford	United States	Massachusetts	New Bedford
1938						
Jan.	14,572	669,722	22,891	11.9	15.8	20.3
Feb.	15,572	674,855	20,471	12.7	15.9	18.2
Mar.	16,958	784,623	22,751	13.8	18.5	20.2
Apr.	16,914	734,836	24,067	13.8	17.3	21.4
May	16,898	710,928	24,964	13.8	16.7	22.1
June	17,208	736,246	25,262	14.0	17.3	22.4
July	17,713	756,015	25,776	14.4	17.8	22.9
Aug.	18,003	765,444	26,132	14.7	18.0	23.2
Sept.	17,988	758,000	25,076	14.7	17.8	22.3
Oct.	18,206	761,709	25,954	14.8	17.9	23.1
Nov.	18,167	753,629	26,640	14.8	17.7	23.7
Dec.	17,840	762,753	26,776	14.5	17.9	23.8
1939						
Jan.	17,916	773,767	27,395	14.6	18.2	24.3
Feb.	18,381	716,086	28,176	15.0	18.3	25.0
Mar.	18,157	786,705	26,949	14.8	18.5	23.9
Apr.	16,836	714,815	24,576	13.7	16.8	21.8
May	15,948	666,136	23,512	13.0	15.7	20.9
June	15,590	663,897	24,932	12.7	15.6	22.1

Note: The three types of Public Assistance include General Relief (1933-1939), WPA (November 1935-1939) and Old Age Assistance (July 1936-1939). While there is a small amount of duplication among these three categories of assistance, it is not believed sufficient to affect the validity of the comparisons made. Data on General Relief and Old Age Assistance were obtained from the United States Social Security Board and the New Bedford Board of Public Welfare; data on WPA were obtained from the Division of Statistics, WPA. Dependents on WPA and General Relief were estimated as follows: For the United States, 3.76 per WPA worker and 3.17 per general relief case; for Massachusetts, 3.72 per WPA worker and 3.45 per general relief case; for New Bedford, 3.69 per WPA worker and geneal relief case.

TABLE IX

NUMBER OF MULE SPINDLES IN NEW BEDFORD IN 1928, BY MILL, BY AGE

Mill	Total	Number of mule spindles and age in years							
		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35 and Over
Booth	12,576	—	—	—	12,576	—	—	—	—
Bristol	17,064	—	—	—	—	17,064	—	—	—
Butler	39,168	—	—	—	—	6,528	32,640	—	—
Dartmouth	6,704	—	—	—	—	—	6,704	—	—
Grinnell	57,620	—	—	—	—	22,004	4,800	9,792	21,024
Hathaway	14,620	—	—	—	—	—	—	—	14,620
Manomet	59,520	—	—	12,672	—	46,848	—	—	—
Neild	26,268	—	—	—	26,268	—	—	—	—
New Bedford Cotton	28,016	—	—	—	28,016	—	—	—	—
Page	24,080	—	—	—	—	24,080	—	—	—
Pierce Bros.	28,400	—	—	—	28,400	—	—	—	—
Pierce Mfg.	56,728	—	—	—	—	8,048	12,072	—	36,608
Potomska	37,560	—	—	—	—	31,280	6,280	—	—
Soule	32,640	—	—	—	—	—	32,640	—	—
Taber	25,920	—	—	—	1,728	24,192	—	—	—
Wamsutta	110,836	—	27,216	—	—	13,248	18,576	14,616	37,180
Totals	577,720	—	27,216	12,672	96,988	193,292	113,712	24,408	109,432
Percentages	100.0	—	4.7	2.2	16.8	33.5	19.7	4.2	18.9

TABLE IX—*Continued*

NUMBER OF RING SPINDLES IN NEW BEDFORD IN 1928, BY MILL, BY AGE

Mill	Total	Number of ring spindles and age in years							
		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35 and Over
Booth	32,276	1,024	5,652	—	25,600	—	—	—	—
Bristol	136,576	—	19,968	—	—	35,712	30,720	—	50,176
City	59,064	—	—	28,708	59,064	—	—	—	—
Fairhaven	45,060	—	2,016	28,708	—	—	—	14,336	—
Gosnold	74,120	—	12,288	8,192	272	—	15,600	—	37,768
Grinnell	47,856	—	—	—	—	—	6,400	19,664	21,792
Hathaway	70,366	—	8,064	16,734	9,216	—	6,144	—	30,208
Holmes	126,464	432	—	3,456	47,808	74,768	—	—	—
Manomet	71,760	—	—	—	—	71,760	—	—	—
Nashawena	240,436	—	28,800	110,836	100,800	—	—	—	—
Neild	36,368	—	3,024	5,184	28,160	—	—	—	—
New Bedford Cotton	45,120	—	768	—	44,352	—	—	—	—
New Bedford Spinning	17,088	—	4,896	6,432	5,760	—	—	—	—
Nonquitt	195,996	—	—	55,680	80,160	60,156	—	—	—
Page	30,720	—	—	—	6,144	24,576	—	—	—
Pemaquid	33,516	—	—	—	33,516	—	—	—	—
Pierce Bros.	23,040	—	—	—	23,040	—	—	—	—
Pierce Mfg.	59,280	—	—	—	—	6,240	30,000	—	23,040
Potomska	66,740	—	—	13,860	—	25,344	24,416	3,120	—
Quisset	80,160	—	—	—	80,160	—	—	—	—
Soule	60,032	14,336	—	—	—	22,400	23,296	—	—
Taber	44,800	—	—	—	8,960	35,840	—	—	—
Wamsutta	111,552	—	27,920	48,640	256	—	—	2,992	31,744
Totals	1,708,390	15,792	113,396	297,722	553,268	356,796	136,576	40,112	194,728
Percentages	100.0	1.0	6.6	17.4	32.4	20.9	8.0	2.3	11.4

TABLE IX—*Concluded*

NUMBER OF LOOMS IN NEW BEDFORD IN 1928, BY MILL, BY AGE

Mill	Total	Number of looms by age in years							
		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35 and over
Bristol	1,878	—	—	—	192	602	—	—	1,084
Butler	3,054	—	432	512	261	341	1,508	—	—
Dartmouth	5,390	596	638	958	805	1,444	949	—	—
Fairhaven	8	2	6	—	—	—	—	—	—
Gosnold	2,606	—	196	—	1,000	598	812	—	—
Grinnell	2,675	—	—	—	—	—	340	729	1,606
Hathaway	3,236	798	560	—	656	8	240	—	974
Nashawena	5,835	2,089	1,370	442	1,934	—	—	—	—
Neild	1,654	168	—	52	1,434	—	—	—	—
New Bedford Spinning	435	243	36	142	14	—	—	—	—
Page	1,689	—	—	—	—	1,689	—	—	—
Pemaquid	456	456	—	—	—	—	—	—	—
Pierce Bros.	1,181	—	—	—	1,181	—	—	—	—
Pierce Mfg.	3,337	—	—	202	314	—	1,481	—	1,340
Potomska	942	654	288	—	—	—	—	—	—
Taber	1,702	—	—	—	1,702	—	—	—	—
Wamsutta	3,275	405	2,376	38	128	216	112	—	—
Totals	39,353	5,411	5,902	2,346	9,621	4,898	5,442	729	5,004
Percentages	100.0	13.8	15.0	6.0	24.4	12.4	13.8	1.9	12.7

TABLE X

Employment Status of All Workers in New Bedford, Mass., by Age and Sex, May 1939

(Five Percent Sample)

Employment Status and Sex	Age										
	Total	Under 21	21–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60 and Over
All Workers	10,858 [1]	1,373	1,324	1,422	1,127	1,181	1,126	1,141	851	637	676
Employed	7,700	722	957	1,110	897	926	833	806	598	412	439
Unemployed	3,158	651	367	312	230	255	293	335	253	225	237
Male Workers	6,826	713	721	826	649	752	714	774	636	494	547
Employed	4,965	365	503	663	519	614	560	579	475	326	361
Unemployed	1,861	348	218	163	130	138	154	195	161	168	186
Female Workers	4,032	660	603	596	478	429	412	367	215	143	129
Employed	2,735	357	454	447	378	312	273	227	123	86	78
Unemployed	1,297	303	149	149	100	117	139	140	92	57	51

[1] Excludes workers with age unknown.

TABLE XI

EMPLOYMENT STATUS OF ALL PERSONS BY COLOR AND NATIVITY, AND SEX, NEW BEDFORD, MASS., MAY 1939

(Five Percent Sample)

Color and Nativity and Sex	Employment Status						Nonworkers
	Total	Workers	Employed in Private Industry	On Emergency Work Projects	Unemployed		
					Seeking Work	Inactive	
All Persons	21,519	10,871	7,711	584	1,836	740	10,648
Native White	14,907	7,116	5,150	440	1,104	422	7,791
Foreign-born White	5,743	3,371	2,357	112	626	276	2,372
Negro	200	95	53	14	20	8	105
Other	667	288	150	18	86	34	379
Unknown	2	1	1	—	—	—	1
Male	10,376	6,832	4,970	494	1,070	298	3,544
Native White	7,234	4,294	3,145	372	630	147	2,940
Foreign-born White	2,697	2,276	1,683	102	368	123	421
Negro	97	58	32	8	13	5	39
Other	348	204	110	12	59	23	144
Unknown	—	—	—	—	—	—	—
Female	11,143	4,039	2,741	90	766	442	7,104
Native White	7,673	2,822	2,005	68	474	275	4,851
Foreign-born White	3,046	1,095	674	10	258	153	1,951
Negro	103	37	21	6	7	3	66
Other	319	84	40	6	27	11	235
Unknown	2	1	1	—	—	—	1

TABLE XII

Socio-economic Groups of Usual Occupation of All Workers, New Bedford, Mass., May 1939

(Five Percent Sample)

Socio-economic Group	Total	Color and Nativity			
		Native White	Foreign-born White	Negro	Other
All Workers	9,770[1]	6,213	3,256	65	236
Proprietors	660	385	262	3	10
Professional	380	335	42	3	—
Clerks	1,402	1,194	195	6	7
Skilled	1,233	732	490	7	4
Semiskilled	4,925	2,921	1,894	14	96
Unskilled	1,170	646	373	32	119

[1] Excludes workers with no usual occupation.

TABLE XIII

EMPLOYMENT STATUS OF ALL AVAILABLE WORKERS, BY INDUSTRY, BY SEX, NEW BEDFORD, MASSACHUSETTS, MAY 1939

(Five Percent Sample)

Industry of Last Full-time Job and Sex	Employment Status					
	Total	Employed in Private Industry	Unemployed	On Emergency Work Programs	Seeking Work	Inactive
All available workers...	10,871	7,711	3,160	584	1,836	740
Male	6,832	4,970	1,862	494	1,070	298
Female	4,039	2,741	1,298	90	766	442
Workers whose last full-time job was in textiles	3,751	2,400	1,351	174	845	322
Male	2,230	1,474	756	161	485	110
Female	1,521	926	595	23	360	212
Workers whose last full-time job was not in textiles	7,120	5,311	1,809	400	991	418
Male	4,602	3,496	1,106	333	585	188
Female	2,518	1,815	703	67	406	230

TABLE XIV

Months Since Last Full-Time Job Ended, for All Unemployed Workers, by Age, New Bedford, Massachusetts, May 1939

(Five Percent Sample)

Age	All Unemployed Workers[1]	Months since last full-time job ended													
		Less than 1	1	2	3	4–6	7–12	13–18	19–24	25–36	37–48	49–60	61–120	121–180	181 and over
All unemployed workers[1] ..	2,631	1	364	179	71	221	349	323	395	238	103	80	232	51	24
Under 15 years	—														
15–18 years	132		29	15	10	24	26	14	13	1					
19 years	71		10	3	2	11	18	10	9	7	1				
20–24 years	356		69	31	10	39	66	37	54	36	6	5	3		
25–29 years	290		65	28	8	34	38	29	32	25	12	7	11	1	
30–34 years	224		33	15	5	22	28	33	31	18	10	11	18		
35–39 years	252		40	14	4	17	29	30	29	31	9	12	28	6	3
40–44 years	288	1	32	20	6	20	29	40	59	24	11	3	32	5	6
45–54 years	570		56	38	13	32	63	80	98	49	27	24	65	20	5
55–64 years	372		23	10	11	19	45	47	57	38	19	15	60	18	10
65–74 years	75		7	5	2	3	7	3	13	9	8	3	14	1	
75 years and over ...	1												1		

[1]Excludes those workers who never had a full-time job, and workers whose age and duration of unemployment was not ascertainable.

TABLE XV

MONTHS SINCE LAST FULL-TIME JOB ENDED FOR UNEMPLOYED WORKERS WHOSE LAST FULL-TIME JOB WAS IN COTTON TEXTILES, BY AGE, NEW BEDFORD, MASSACHUSETTS, MAY 1939

(Five Percent Sample)

Age	Unemployed Workers[1]	Months since last full-time job ended													
		1	2	3	4–6	7–12	13–18	19–24	25–36	37–48	49–60	61–120	121–180	181 and more	Months not ascertainable
Unemployed workers[1]	1350	186	95	25	64	147	197	271	125	53	41	106	26	11	3
Under 15 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15–18 years	25	8	2		5	3	3	3	1						
19 years	15	3	1			2	4	1	4						
20–24 years	122	19	13	2	5	20	16	28	13	2	2	2			
25–29 years	126	28	12	3	9	14	13	19	13	7	3	5			
30–34 years	111	16	9	3	7	15	18	22	8	3	3	7			
35–39 years	141	24	9		5	14	20	19	17	7	7	12	5	1	1
40–44 years	188	23	15	2	9	23	32	45	12	7	2	15	1	2	
45–54 years	371	45	26	9	14	34	59	81	29	16	14	30	9	3	2
55–64 years	222	18	6	6	9	20	32	43	24	8	10	30	11	5	
65 years and over	29	2	2		1	2		10	4	3		5			

[1] Includes all unemployed workers whose last full-time job was in the cotton textile industry, with the exception of one worker whose age was not ascertainable.

TABLE XVI

EMPLOYMENT STATUS OF HUSBANDS OF MARRIED WOMEN WORKING IN NEW BEDFORD, MASSACHUSETTS, MAY 1939

(Five Percent Sample)

Employment status of husband	All married women	Married women working in textiles	Married women not working in textiles
All married women	1,101	531	570
Husband not in household	22	5	17
Husband in household	1,079	526	553
Husband employed	890	423	467
Husband unemployed ..	163	91	72
Husband a nonworker ..	26	12	14

TABLE XVII

REASONS FOR NOT SEEKING WORK, FOR INACTIVE WORKERS AND NON-WORKERS, BY SEX, NEW BEDFORD, MASSACHUSETTS, MAY 1939

(Five Percent Sample)

Reasons for not seeking work	Total	Male	Female
All persons not seeking work [1]	11,385	3,842	7,543
Inactive workers	740	298	442
On unpaid vacation	10	3	7
Temporary illness	268	101	167
Believes no work available	250	106	144
On temporary layoff	146	51	95
Other reasons	66	37	29
Nonworkers	10,645	3,544	7,101
Homemaker	3,701	8	3,693
Student	1,888	998	890
Too young	3,729	1,867	1,862
Too old, retired	503	310	193
Permanent disability	569	251	318
Other reasons	255	110	145

[1] Excludes persons whose reasons for not seeking work were not ascertainable.

TABLE XVIII

EMPLOYMENT STATUS OF FAMILIES, BY NUMBER OF WORKERS PER FAMILY, NEW BEDFORD, MASSACHUSETTS, MAY 1939

(Five Percent Sample)

Employment Status	Total families	Number of workers in family				
		No workers	One worker	Two workers	Three workers	Four or more workers
Total families	7,003	770	3,112	2,100	657	364
With some worker privately employed	5,148	—	2,328	1,871	600	349
With no worker privately employed	1,855	770	784	229	57	15

TABLE XIX

ALL FAMILIES WITH WORKERS, BY EMPLOYMENT STATUS OF PRIMARY AND SECONDARY WORKERS DURING CENSUS WEEK, NEW BEDFORD, MASSACHUSETTS, MAY 1939

(Five Percent Sample)

Employment status of secondary workers and number of workers in family	Total	Employment status of primary worker	
		Employed	Unemployed
All families with workers	6,233	4,643	1,590
Families with no secondary workers	3,112	2,328	784
Families with secondary workers ..	3,121	2,315	806
One secondary worker	2,100	1,599	501
Employed	1,458	1,188	270
Unemployed	642	411	231
Two secondary workers	657	470	187
Both employed	293	228	65
Only one employed	249	184	65
Both unemployed	115	58	57
Three or more secondary workers	364	246	118
All employed	124	96	28
At least one employed	206	131	75
All unemployed	34	19	15

TABLE XX

Months Since Family's Most Recent Full-Time Job Ended, by Number of Workers Per Family, New Bedford, Massachusetts, May 1939

(Five Percent Sample)

Months since family's most recent full-time job ended	All families	Number of workers in family		
		No worker families	One worker families	Two or more worker families
All families	7,003	770	3,112	3,121
Some workers employed at last full-tme job	4,705	—	2,088	2,617
No worker employed at last full-time job	2,298	770	1,024	504
No worker ever had a full-time job	184	143	34	7
Some workers had a full-time job	2,114	627	990	497
Less than 1 month	—	—	—	—
1 month	279	5	141	133
2 months	121	7	64	50
3 months	38	1	23	14
4–6 months	119	7	69	43
7–12 months	206	32	112	62
13–24 months	408	64	237	107
25–36 months	145	41	81	23
37–48 months	102	38	48	16
49–60 months	94	49	35	10
61–120 months	307	156	123	28
121–180 months	122	87	28	7
181 months and over	152	128	20	4
Months not ascertainable	21	12	9	—

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