AN INVESTIGATION IN REGARD TO THE CONDITION OF LABOR AND MANUFACTURES IN MASSACHUSETTS, 1860-1870

JONATHAN F. SCOTT.

In making a study of the effects of the Civil War upon economic conditions in any part of the country, it is unsafe to assume, for purposes of comparison, that the year 1860 was a year of prosperity, and that a healthy state of affairs during the next five years is proved by gains over conditions existing in that year. In order to prove progress by means of comparisons between 1860 and later years, it must be shown that in 1860, the recovery from the Crisis of 1857 was complete. If, for example, we find an industry in poorer condition in 1865 than it was in 1855, we may assume one or more of the following causes: 1. that the effects of the crisis have been felt by this industry for eight years. 2. that the industry has been depressed by the economic disturbances accompanying the war. 3. that special circumstances have caused its decline. The question is not only whether conditions in 1865 were better than they were in 1860 or 1861, but whether there has been a normal advance since 1857.

There is no doubt that by 1860, Massachusetts was at least beginning to recover from the crisis. The governor, in his address, Jan. 6, 1860, said “the mechanical, manufacturing, and commercial interests are recovering from recent depression and will soon exhibit, with such aid as the general government may properly grant, their former vigor and success.”¹ The number of firms and corporations established in 1860, and reported to

¹Reported in the Boston Daily Advertiser, Jan. 7, 1860.
be in existence in 1890, was 396, as over against 160 in 1859 and 174 in 1858. The amount of deposits in savings-banks was considerably larger than in previous years and the number of depositors had increased. The average number of paupers supported at the three state almshouses was less than it had been for some time. The Boston Board of Trade reports the various articles of produce as showing, with a few exceptions, a fair increase over previous years. On the whole, the clouds seemed to be breaking, and there were prospects of fair weather in the business world.

I am inclined to think, however, that Massachusetts was recovering more slowly from business depression than the country as a whole. The wool industry seems to have been less flourishing in 1860 than in 1859, while the boot and shoe trade was in a state of unusual depression. In the country at large, on the other hand, E. D. Fite says, "the crops were abundant, and manufacturing, with few exceptions, was active in every branch. . . . All branches of commercial life were reasonably prosperous, looking forward to the future with confident hopes of growth and expansion, and relying on peace to bless their ventures." The Boston Daily Advertiser indignantly resents the statement of Mr. Douglas that "the mechanics and laborers of New England are now reduced to the starvation point," but it goes on to say "prices are so low that some classes of manufacturers cannot pay to their workmen wages sufficient for their support." Certainly these statements do not indicate the existence of prosperity in Massachusetts at the beginning of the decade. Furthermore, figures taken from the Report of the Boston Board of Trade for 1861, show that the value of exports, from the District of Boston and Charlestown,

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2 Walden, The Growth of Manufactures, p. 308
5 Report of the Boston Board of Trade, 1861; Review of the Market for 1860.
6 Ibid.
7 Ibid; also Boston Daily Advertiser, March 5, 1860.
8 Fite, Prosperity during the Civil War, p. 2.
9 March 5, 1860.
fell from $28,326,918 in 1857 to $15,168,015 in 1860, a decrease of nearly 47 per cent. During the same period the value of exports from the United States as a whole rose from $362,960,682 to $400,122,296, an increase of over 9 per cent. Imports into Boston decreased about 12 per cent. Imports into the country at large decreased a little less than 3 per cent. These bits of evidence tend to show that Massachusetts was still in the shadow of the panic and that she was not as well off as the country at large, in 1860.

Among the causes of economic disturbance during the war period were the enlistment of great numbers of laboring-men, the stoppage of trade between North and South, the constant fear of military disaster, and the issue of paper money. Of these, the last was the most potent in bringing trouble. The enormous expenses of the war necessitated the issue of paper currency, a measure which was, in reality, the exaction of a forced loan. Owing to lack of confidence in the government the greenbacks depreciated in value, or—to put it the other way around—gold was at a premium. Dewey gives a table showing the average annual value in gold of $100.00 in currency, from 1863 to 1878.\(^\text{10}\) Not until December 17, 1878, was paper currency quoted at par.\(^\text{11}\)

<table>
<thead>
<tr>
<th></th>
<th>1861</th>
<th>1862</th>
<th>1863</th>
<th>1864</th>
<th>1865</th>
<th>1866</th>
<th>1867</th>
<th>1868</th>
<th>1869</th>
<th>1870</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$72.9</td>
<td>68.9</td>
<td>64.9</td>
<td>69.5</td>
<td>71.3</td>
<td>70.9</td>
<td>71.3</td>
<td>72.7</td>
<td>82.7</td>
<td>97.5</td>
</tr>
</tbody>
</table>

The results of the depreciation of the paper currency were far reaching, but it is here important to us chiefly on account of its effects upon wages and prices. The comfort of the laboring-man depends largely upon these two factors. If prices are high and wages are low he is likely to suffer. If, on the other hand, wages are high, and the purchasing power of money is considerable, it is probable that he is in fairly comfortable circum-

\(^\text{10}\) Financial History of the United States, p. 376.
\(^\text{11}\) Financial History of the United States, p. 375.
stances, unless, of course, he is not steadily employed. The
depreciation of paper money caused a rise in the nominal value
of wages and prices. They were both raised, but not propor-
tionately. The following figures from the Aldrich Report\(^{12}\)
will bring this out.

<table>
<thead>
<tr>
<th>Year</th>
<th>Simple average</th>
<th>Average according to importance</th>
<th>Year</th>
<th>All articles simply averaged</th>
<th>Average according to importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>100.0</td>
<td>100.0</td>
<td>1860</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1865</td>
<td>145.1</td>
<td>168.8</td>
<td>1865</td>
<td>160.5</td>
<td>150.7</td>
</tr>
<tr>
<td>1869</td>
<td>178.2</td>
<td>184.9</td>
<td>1869</td>
<td>153.5</td>
<td>155.9</td>
</tr>
</tbody>
</table>

In 1862 prices began to soar above wages. By 1865 the
former were more than twice what they had been in 1860, while
the increase in wages was between forty and fifty per cent for
the same five years. In other words, the increase in prices was
more than double the increase in wages. This was not entirely
due to the inflation of the currency, but it may be attributed
largely to that cause. From 1865 to 1873 wages gradually in-
creased while prices went down. By 1869 the percentage for
wages was higher than the percentage for prices. The figures
in the Aldrich Report are said to be somewhat untrustworthy,
but they seem to show that the condition of the workingman,
while not an enviable one during the war period, improved dur-
ing the latter half of the decade, so that by 1869 he was better
off than he had been in 1860.\(^{13}\)

Statistics for Massachusetts show the increased cost of living
in that state during the war. From the table given here we
see that income has not kept pace with expenses.\(^{14}\)

\(^{12}\) Pages 9, 13.

\(^{13}\) Prof. Mitchell in his book "Gold, Prices, and Wages under the
Greenback Standard," says, "The wage-changes from 1867 on cannot
be explained as a defense of the standard of living prevailing
in 1860. In other words, the advance in money wages from 1867 to
1872, represents a real improvement in the position of wage-earners—very slow from 1867 to 1869, faster in the next two years." P. 245.

The Daily Evening Voice, a labor paper published in Boston, asserts in 1864, that never “in the history of this country was there such a gripe upon the laborer as at the present time. He is taxed for all the luxuries of the wealthy, which he is too poor to enjoy.”

Allowing for partisan exaggeration in this latter statement, it is yet clear that the workingman in Massachusetts was having a hard struggle for his livelihood during the Rebellion. It is probable, however, that if willing to work he found little trouble in securing and retaining employment from 1863 to the end of the war.

After the war there was an increased demand for labor in the state, owing to a general revival of manufactures. Employment continued to be steady during the latter half of the decade. The number of hands employed in manufactures increased more than 28 per cent during the ten years, while the population increased only 18 per cent; 39 per cent of the population are returned as being engaged in gainful occupations in 1870, as over against 37 per cent in 1860. On the other hand, the relation between wages and prices was slow of readjustment. The Commissioners on the Hours of Labor conclude that the average advance of wages in 1867 over 1860 has been

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16 "In nearly all departments of trade there was a scarcity of labor, and all who were willing to work found employment at good prices." Report, Boston Board of Trade, 1867, p. 42.
17 Voice, July 26, 1865, quoting from the Newburyport Herald; Ibid, Aug. 21, 1865, quoting from The Traveller; Ibid, Sept. 22, 1865, quoting from the Lynn Bulletin, etc.
18 Reports Boston Board of Trade, 1866-1871. Passim.
19 From figures given in United States Census Reports, 1860, 1870.
20 Ibid.
about 50 per cent, whereas prices have risen over 100 per cent.\(^{21}\) The following tables, constructed from the Report of the Massachusetts Bureau of Statistics of Labor for 1879 \(^{22}\) compare wages and prices in 1860 with wages and prices in 1872, the values being reduced to a gold basis.

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Average weekly wage standard gold</th>
<th>Articles</th>
<th>Average retail prices standard gold</th>
<th>Approximate increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural laborers, per week,</td>
<td>1850 1872</td>
<td>Flour, wheat, superfine, bbl.</td>
<td>1850 1872</td>
<td>1850 1872</td>
</tr>
<tr>
<td>with board.</td>
<td>$3.41 $3.75</td>
<td>$3.00 $3.75</td>
<td>27.01 21.75</td>
<td>27.01 21.75</td>
</tr>
<tr>
<td>Cutters of boots and shoes.</td>
<td>8.90 7.30</td>
<td>Sugar, good, brown, ib.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td>Cutters of Clothing.</td>
<td>13.72 12.95</td>
<td>Beef, corned, lb.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td>Cotton dyers.</td>
<td>5.97 8.83</td>
<td>Butter, lb.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td>Cotton goods mechanics.</td>
<td>8.35 10.96</td>
<td>Cheese, lb.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td>Woolen goods, dyers.</td>
<td>5.72 7.25</td>
<td>Potatoes, bu.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td>Woolen goods, carders.</td>
<td>5.72 7.25</td>
<td>Milk, qt.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td>Woolen goods, mechanics.</td>
<td>4.89 12.47</td>
<td>Eggs, doz.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coal, ton.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wood, cord, hard.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Books, men’s heavy.</td>
<td>0.081 0.104</td>
<td>0.081 0.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rent, 4 rooms tenement, week</td>
<td>1.11 0.92</td>
<td>1.11 0.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Board, week, men</td>
<td>2.70 5.82</td>
<td>2.70 5.82</td>
</tr>
</tbody>
</table>

From these tables it appears that wages went up about 48 per cent during the twelve years, while fuel went up over 50 per cent, provisions 55 per cent, and board and lodging about 139 per cent. Other evidence \(^{24}\) supports the conclusion that the workingman of Massachusetts was not as well off in the latter sixties and early seventies as he had been before the war. C. R. Fish, in speaking of economic conditions in Wisconsin after the war, says, “The ease with which Wisconsin adjusted itself to these two successive labor difficulties (of which he has given an account) suggests interesting questions as to the relative elastic-

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\(^{21}\) Report of the Commissioners on the Hours of Labor, Boston, 1867, pp. 16, 17.

\(^{22}\) Pages 67 ff.

\(^{23}\) Approximately.

\(^{24}\) Table giving expenses of a house-carpenter of Salem, Mass., given in Report Mass. Bureau of Statistics of Labor, 1872, p. 522; Report Boston Board of Trade, 1868, p. 121, says “The merchant, the manufacturer, and the mechanic, who, in taking a retrospective glance at his business during the past twelve months, finds a balance in his favor, may consider himself fortunate, for his case is the exception and not the rule.” See also Boston Daily Advertiser, Jan. 13, 1870.
ity of agricultural as compared with manufacturing communities.” 25 The evidence which has been presented here seems to indicate a slower recovery in manufacturing communities, for Massachusetts is preeminently a manufacturing state.

The fluctuations of wages and prices and the discontent arising therefrom had many results. For one thing, there were attempts on the part of workingmen to combine. During and after the war we find trades-unions, as well as other kinds of associations of workingmen, multiplying and increasing in strength. 26 Although these forms of resistance often failed, they are at least a partial cause of the improvement of the relations between labor and capital which came about in the seventies. During the sixties we also find a considerable agitation for shorter hours of labor. The Voice frequently complains of the injustice of compelling employees, particularly women, to work eleven or more hours a day in a factory. Eight Hour Leagues were formed in Boston, 27 and a commission was appointed by the legislature of Massachusetts to inquire into the question of the hours of labor. The commissioners, in their report of January, 1867, make the following statement: “Answers to the . . . inquiry were received from seventy-four establishments, which give the following as the hours of labor:—

5 worked 10½ hours.
63 worked 11 hours.
4 worked 12 hours.
12 worked irregular hours, 8 to 15.

From this it will be seen that eleven hours is the rule, and any longer or shorter time the exception in the factories of the Commonwealth.” 28 Much of this agitation centred around, and was chiefly caused by, the employment of women and children in the factories. The withdrawal of large numbers of men for the army frequently left the burden of supporting their families

26 Voice, Dec. 28, 1864; Jan. 5, 1865; also 1865, 1866 passim; Rept. Boston Board of Trade 1870, p. 127.
27 Voice, Sept. 16, 1865, and passim; Report of the President of the Boston Eight Hour League, 1872.
28 P. 8.
upon their wives and children, who were sometimes forced, especially in the last two years of the war, to seek employment in the factories. The commissioners to whom we have just referred, say “We have been satisfied from our personal observation, as well as the testimony of those best qualified to judge, that eleven hours’ toil each day for six days in each week is more than women and children ought to be required to perform. We are certain that they cannot do this without impairing, sooner or later, their vital powers, and shortening the duration of life. We are confident that it is a most uneconomical waste of life, which it is the interest of the state to prevent.”

The commissioners find that 60 per cent of the employees in 65 factories were women. The appointment of this commission shows that the state was beginning to be aroused to the necessity for action. Not until 1874, however, did the agitation bear fruit in legislation. In that year the ten-hour law was passed, limiting the labor of women, and of children under eighteen years of age, to ten hours a day. The law was practically not in operation until 1879.

The disproportion of women to men in Massachusetts somewhat affected economic conditions. In 1860 there were 592,253 white males in Massachusetts and 629,312 white females. In 1865 there were 597,222 white males and 659,642 white females. The excess of females over males amounted to 36,959 in 1860, while in 1865 it was 62,420. It had increased 41 per cent during the war. Governor Andrew notes some of the effects of the disproportion. “It disorders the market for labor; it reduces women and men to an unnatural competition for employments fitted for men alone, tends to increase the number of both men unable to maintain families, and of women who must maintain themselves unaided.”

The competition between the sexes for employment tended to lower men’s wages. Women could sometimes do the same work as men, especially in the

28a. Ibid.
28b. Ibid.
29 Whittlesey, Massachusetts Labor Legislation, etc., p. 12.
32 Governor’s Address to the Legislature of Mass., Jan. 6, 1865.
factories, and were willing to accept less pay.\textsuperscript{33} The excess of female over male labor may have had something to do with the comparatively slow readjustment of wages after the war. On the other hand, it had an indirect, but beneficial effect, in that it was a partial cause of the agitation for shorter hours. After the war the disproportion between male and female employees decreased, and by 1870 it was slightly less than it had been in 1860.\textsuperscript{34}

In 1865, there came, as has been stated, an increased demand for labor. Confidence was now restored, and it seemed that with the encouragement of the war tariff, the use of new labor-saving machinery, and constantly increasing facilities for transportation, manufactures must flourish. The demand for labor was met by two classes of men. In the first place, there were the returned soldiers. Many of these very naturally stepped into the unfilled places in the mills and factories. Secondly, there were immigrants from Europe and British America to meet the demand for unskilled labor. Immigration into Massachusetts had fallen off enormously between 1855 and 1865. In 1850 there were 164,024 foreign born persons in the state; in 1855 there were 244,685, an increase of 80,661 persons.\textsuperscript{35} In 1865, however, there were only 265,486 foreigners in Massachusetts,\textsuperscript{36} an increase of but 20,801 over 1855. In other words, the number of immigrants during the ten-year period 1855 to 1865 was less than a third of what it had been during the five-year period 1850 to 1855. In 1870, however, we find 353,319 foreign-born persons in Massachusetts,\textsuperscript{37} an increase of 87,833 in the five years following the war. A large proportion of these people went into the factories. Miss Turvill, in her thesis "Immigration into Massachusetts, 1820–1900," says "About two-thirds of the Canadians who were employed were found in manufacturing industries. In this respect, the French-

\textsuperscript{33} The Voice, July 25, 1865, gives the average daily wages of a woman at 87½ cents.
\textsuperscript{34} U. S. Census Reports, 1860 and 1870, give the number of hands employed: Male, 1860, 146,268; 1870, 179,032; Female, 1860, 71,153; 1870, 86,229.
\textsuperscript{36} Mass. Census Report, 1865.
\textsuperscript{37} U. S. Census Report, 1870.
Canadians ranged second among the foreign nationalities.\footnote{Turvill, p. 67.} The Irish were first.\footnote{Ibid, p. 92.}

It is usually stated that the Civil War acted as a stimulus to manufactures. Carroll D. Wright, in his “Industrial Evolution of the United States” says, “The North held the mechanical industries of the country, and naturally under the stimulus of war, these industries could be expanded to almost any extent, and they were so expanded, giving to the North every resource of power which mechanics give to great armies.”\footnote{Wright, Industrial Evolution of the United States, p. 153.} A recent careful investigation, while taking a somewhat more moderate view, concludes that manufactures in the North recovered speedily from the depression of 1861 and flourished during the remainder of the Rebellion.\footnote{Fite, Prosperity During the War; A Study of Northern Conditions, p. 63.} It is not our purpose here to determine whether these conditions hold good for the whole North, but whether they apply to Massachusetts.

Indications of prosperity in Massachusetts during the war period are to be found in the reports of the Boston Board of Trade. The Board admits a falling off in many branches of business in 1861, but says “the disasters so confidently predicted, have not been realized to their full extent. What a year of prosperity the past would have been if it were not for the present civil war.”\footnote{Report Boston Board of Trade, 1862, p. 63.} In reviewing the market for the year 1862, the Report of the Board says, “The industry of Massachusetts, paralyzed for a short time at the commencement of the struggle, soon recovered from the depression ... the result of the war so far has been to impart increased activity to many of our leading branches of manufacture, and, all things considered, the productive industry of the state was never more fully developed or more prosperous than at the present time.”\footnote{Report Boston Board of Trade, 1863, p. 43.} The Reports of the Board for the two following years give us the same idea of the general prosperity of manufactures.\footnote{Ibid, 1864, p. 59; 1865, p. 63.} All this evidence must not be underestimated, for it is, in the main,
the result of a careful study of statistics. It is possible, however, that the Board was deceived by the high prices which prevailed, and which were chiefly due to the premium on gold, into thinking that industry was in a flourishing condition. In fact, the Report for 1867 admits that “From 1862 to 1866 was a period of seeming prosperity.”

There is no doubt that certain individual manufacturers made enormous fortunes during war times. There is no doubt, also, that certain industries in Massachusetts were stimulated by the change in conditions. Of these the most important was the manufacture of wool. Even before the war there were signs that this industry was to have a rapid growth. Governor Andrew, in his address to the legislature, Jan. 5, 1861, said, “Attention to sheep husbandry is now on the increase, by reason of the protection which has been afforded to it by judicious legislation, and the importance of this branch of farming to the various interests of New England can hardly be over-estimated.” Later, when the war came, the high price of cotton increased the demand for woolen goods. Cotton factories in the neighborhood of Boston became woolen factories. Between 1855 and 1865 the number of establishments for the manufacture of wool increased from 146 to 218, while the number of pounds of wool consumed grew from about 19,000,000 to nearly 29,000,000. After the war the business became less profitable. The Boston Board of Trade reports in 1869 “scarcely a woollen mill in New England . . . has done a profitable business, and most of them will be satisfied, if, on balancing the profit and loss of the year, there is no actual loss.” In 1870 the industry had not improved. In fact the following table giving the number of bales received in Boston annually from 1860 to 1870 shows a falling off in 1870 from 1869.

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46 P. 42.
46 Address to the Legislature, Jan. 5, 1861; see also Boston Daily Advertiser, May 1, 1860.
47 P. 12.
48 De Witt, Statistical Information Relating to Certain Branches of Industry in Massachusetts, etc., for 1855; and Warner, Ibid, for 1865.
49 Report Boston Board of Trade, 1870, p. 128.
51 From Reports Boston Board of Trade, 1860-1870.
These figures, however, give an idea of the gain of the wool industry during the decade. Though profits were probably small for some time after the war, the trade was too firmly established to be permanently injured. It is probably fortunate for the economic progress of the state that the wool industry in large measure took the place of the manufacture of cotton, since the soil of New England is by nature adapted to the raising of sheep, whereas cotton has to be transported from a great distance.

The industry which had been the most important in the state before the war was the one to suffer most between 1861 and 1865. The cutting-off of the supply of raw material from the South was, of course, the chief cause for the decline in cotton manufacture. The number of bales received in Boston in 1860 was 361,966. In 1864 it was 77,890, a decrease of nearly 400 per cent. But little over half as many yards of cloth were manufactured in 1865 as in 1855. 53 The Southern market speedily revived after the war, however. The newspapers tell us in July 1865, "There is not a spindle or loom in the country that would not be put in motion if skilled labor could be had for that purpose." 54 In 1869, however, many manufacturers had to stop their mills on account of the depressed state of the trade, and in 1870, though business was more satisfactory than it had been the year before, profits were not large, while the number of bales received in Boston was not nearly as large

52 Reports Boston Board of Trade, 1860-1870.
53 De Witt, Statistical Information, etc., 1855; Warner, Ibid, 1865.
54 Voice, July 26, 1865, quoting from the Newburyport Herald; see also Voice, Oct. 1, Oct. 6, Nov. 25, 1865, for other notices relative to the revival of this branch of manufacture.
55 Report Boston Board of Trade, 1870, p. 127.
56 Ibid, 1871, p. 133.
as it had been in 1860.\textsuperscript{57} In fact the progress of cotton manufacture in the state had been permanently retarded by reason of the growth of the wool industry and by the fact that the South had been thrown on its own resources during the war period, and was learning to manufacture its own cotton.

A third industry ranking in importance with cotton and wool was the manufacture of boots and shoes. Here we note a decline between 1855 and 1865. The annual output of the factories dropped from about 45,000,000 pairs to about 31,000,000 pairs during the ten years,\textsuperscript{58} while the number of manufacturers decreased during the war period from 1,885 to 1,269.\textsuperscript{59} In 1859, 750,000 cases of boots and shoes were shipped from Boston; in 1865, 715,844, while the figures for intervening years are much smaller.\textsuperscript{60} Immediately after the war there came a rapid reaction. “The shoe business was never more promising than at this time,” says the Daily Evening Voice, August 21, 1865, and again, “The shoe business of Lynn was greater than it has ever been before for a corresponding length of time.”\textsuperscript{61} The following figures, giving the number of cases forwarded annually from Boston indicate the progress of the industry from 1866 to 1870.\textsuperscript{62}

\begin{tabular}{|c|c|}
\hline
Year & Cases forwarded \\
\hline
1866 & 852,622 \\
1867 & 833,379 \\
1868 & 1,041,472 \\
1869 & 1,182,704 \\
1870 & 1,218,129 \\
\hline
\end{tabular}

The number of establishments increased during these five years, and while the number of hands employed was slightly less in 1870 than it had been in 1860,\textsuperscript{63} this may probably be accounted for by the introduction of labor-saving machinery such as the McKay sewing machine, for sewing uppers to soles. This was patented in 1858 and put on the market in 1862. This inven-

\begin{itemize}
\item \textsuperscript{57} Ibid, Reports 1860–1871. 381,966 bales received in 1860. 265,026 bales received in 1870.
\item \textsuperscript{58} DeWitt, Statistical Information, etc., 1855; Warner, Ibid, 1865.
\item \textsuperscript{59} Mass. Census Reports, 1860, 1865.
\item \textsuperscript{60} Reports Boston Board of Trade, 1860–1866.
\item \textsuperscript{61} Oct. 22, 1865.
\item \textsuperscript{62} Reports Boston Board of Trade, 1871.
\item \textsuperscript{63} U. S. Census Reports, 1860, 1870, give 62,283 hands employed in 1860. 54,831 hands employed in 1870.
\end{itemize}
tion was instrumental in bringing the boot and shoe industry from the small shops to the factories. The Boston Board of Trade reports the industry as being in a very flourishing condition in 1870. It is clear, that this branch of manufacture, though temporarily retarded during the war, was not seriously checked, but made rapid strides after peace had been proclaimed. Today Massachusetts is preeminently the shoe-manufacturing state of the Union.

The fifteen years from 1855 to 1870 saw a great advance in the manufacture of sewing-machines. The number of machines manufactured in Massachusetts increased from about 4,000 in 1855 to nearly 50,000 in 1865. The number of hands employed in this business was 514 in 1860, 1033 in 1870. Indirectly the extensive use of the sewing-machine somewhat affected the labor market. Women who had other sources of income sometimes took needlework at very low prices in order to afford themselves luxuries or to contribute to the family support. This reacted on the labor of other women, forcing them to accept low wages. The Voice in 1864 estimates the average wages of sewing-women at $3.00 to $3.50 per week, a low rate at any time, but a most miserable pittance in a period of inflated currency. The value of the sewing-machine to the household, however, more than offset any disturbances which it may have brought to the labor-market.

No study of economic conditions in Massachusetts at this time would be complete without some account of the decay of the merchant marine. In the first half of the nineteenth century very many of the coast and river towns of Massachusetts were important ship-building places. Boston was, of course, the most conspicuous of these, but Salem, Newburyport, Ames-

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64 Fite, pp. 68, 69.
65 Report, 1871, p. 139.
66 DeWitt, Statistical Information, etc., 1855; Warner, Ibid, 1865.
67 U. S. Census Reports, 1860, 1870.
68 Voice, Apr. 7, 1865.
70 U. S. Census Report, 1880, vol. VIII, The Ship Building Industry in U. S., p. 110. "For a long period Boston was the first of American cities in the amount of tonnage owned by her merchants, and she has always ranked as one of the first four."
bury, and Haverhill also had large industries. In 1880 the situation had entirely changed. "At present, except at Newburyport, ship-building has been completely abandoned on the Merrimac, and that town in the census year (1880) presented a desolate array of abandoned ship yards, boat-shops, and ropewalks."

In 1860, wages for ship-building had reached their highest point, $20.84 a week; in 1878 they had gone down to $10.75. In 1860 the total tonnage of American vessels amounted to over 12,000,000 tons. In 1870 it had declined to less than 7,000,000. In 1860, 70 per cent of the carrying trade between Great Britain and the United States was in the hands of American ship-owners; in 1870 only 24 per cent.

Not all of this decline is to be attributed to the Civil War. It is probable that the industry would have decayed even had there been no war. The change from wood to iron hulls was an advantage to Great Britain, for at the time of this change she produced much more iron than the United States. The change from paddle to screw also tended to throw the business of shipbuilding into England’s hands. The abandonment of subsidies for the Collins Line and others in 1857, is thought to have been another cause of decay. Reciprocity treaties with Great Britain, in which she took advantage of us, the transition from sail to steam, the diversion of business enterprise and capital to other more profitable pursuits, the increased cost of materials and labor, the navigation laws and other national and state restrictions, have all been considered partial causes of decline. The decay was consummated, however, during the Civil War. At that time Confederate vessels preyed on our commerce, so that a large number of American ships transferred to foreign flags for protection. After the war they were pre-

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71 Ibid, p. 108.
72 Wright, Wages and Prices, pp. 28 ff.
74 Ibid.
80 Ibid.
vented by our navigation laws from becoming American vessels again.\textsuperscript{81} Ship-builders now found their business unprofitable, and while many of them struggled on for some time, others turned their attention to more profitable fields of enterprise. From the blow delivered by the Civil War, our shipping industry has never recovered.

Having traced the course of some of the more important industries in Massachusetts during and after the war, let us examine the following table which compares conditions of certain branches of manufacture in 1865 with conditions in 1855.\textsuperscript{82}

<table>
<thead>
<tr>
<th></th>
<th>1855</th>
<th>1865</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>314,985</td>
<td>314</td>
</tr>
<tr>
<td>Yards of cloth manufactured</td>
<td>3,671</td>
<td>3,671</td>
</tr>
<tr>
<td>Number of establishments</td>
<td>894</td>
<td>894</td>
</tr>
<tr>
<td>Wool</td>
<td>18,786</td>
<td>18,786</td>
</tr>
<tr>
<td>Lbs. of wool manufactured</td>
<td>28,790,273</td>
<td>28,790,273</td>
</tr>
<tr>
<td>Yards of broadcloth manufactured</td>
<td>5,457,705</td>
<td>5,457,705</td>
</tr>
<tr>
<td>Sewing machines</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Number of establishments</td>
<td>802</td>
<td>802</td>
</tr>
<tr>
<td>Sewing machines manufactured</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Calico</td>
<td>51,950,000</td>
<td>51,950,000</td>
</tr>
<tr>
<td>Number of yards printed</td>
<td>4,689</td>
<td>4,689</td>
</tr>
<tr>
<td>Bleaching and coloring</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Number of establishments</td>
<td>814</td>
<td>814</td>
</tr>
<tr>
<td>Number of hands employed</td>
<td>447</td>
<td>447</td>
</tr>
<tr>
<td>Boots and shoes</td>
<td>33,174,400</td>
<td>33,174,400</td>
</tr>
<tr>
<td>Pairs of boots manufactured</td>
<td>24,020,600</td>
<td>24,020,600</td>
</tr>
<tr>
<td>Pairs of shoes manufactured</td>
<td>5,240,921</td>
<td>5,240,921</td>
</tr>
</tbody>
</table>


From this table and the other evidence thus far presented it is clear that many industries, and especially the more important ones,\textsuperscript{83} were not only retarded in their natural rate of progress during these ten years but were not as well off in 1865 as they had been ten years before.

During the twenty years preceding the Crisis of 1857, the

\textsuperscript{82} Constructed from DeWitt, Statistical Information, etc., for 1855, and Warner, Ibid, for 1865.
\textsuperscript{83} Wool excepted.
industrial progress of Massachusetts was enormous. In 1838
the annual amount of industrial products was eighty-six million
dollars; in 1845 it was one hundred twenty-four millions, and
in 1855 two hundred ninety-five millions.\textsuperscript{84} Between 1845 and
1855 the increase in value was 138 per cent. Between 1855
and 1865, however, it was only 72 per cent, according to Oliver
Warner,\textsuperscript{85} who has collected the statistics on the subject. Fur-
thermore, if the inflated condition of the currency in 1865 be
taken into account, it is clear that the real increase was much
less than 72 per cent. In fact, if we accept Dewey's calculation
that a paper dollar in 1865 was, on the average, worth less than
fifty cents,\textsuperscript{86} the supposed increase in the value of manufactured
products becomes a decrease.

Other evidence supports the conclusion that the progress of
manufactures slackened during the war period. According to
Warner, there were 271,421 hands employed in various kinds
of manufacture in 1855. In 1865, there were 245,908, a fall-
ing-off of over 25,000.\textsuperscript{87} This alone would not prove a de-
pression of manufactures, for it may be partially, perhaps
wholly, accounted for by the introduction of new labor-saving
machinery. How many men this new machinery threw out of
employment we have no means of knowing. Glance, however,
at the following table, which gives a comparison between the
number of males over fifteen years of age engaged in certain oc-
cupations in 1860, and those engaged in the same occupations
in 1865.\textsuperscript{88}

\textsuperscript{84} Warner, Statistical Information, etc., for 1865, pp. xxi and xxii.
\textsuperscript{85} Ibid.
\textsuperscript{86} Financial Hist. U. S. p. 376; see table given above, p. 3.
\textsuperscript{87} Warner, p. 793.
\textsuperscript{88} Constructed from Mass. Census Reports 1860, 1865. Note also that
between 1855 and 1865 the number of manufacturers in Mass. de-
The foregoing table shows a falling-off in the number of manufacturers and in the number of mill operatives, and combines with the other evidence presented, to prove that, in general, manufactures declined in Massachusetts between 1855 and 1865. Much of this decline came during the war period, and in spite of the encouragements of the war tariff. It was probably due to the after-effects of the Crisis of 1857, and to the economic disturbances accompanying the war.

After the cessation of hostilities, manufactures seemed to take on new life. Fear of disaster had passed away, confidence was restored and the opening of the Southern market afforded new opportunities for trade. The transition from war to peace seems not to have been very disastrous. By 1870 it is probable that manufactures were in fairly good condition. The number of establishments had increased from about 8,000 to over 13,000 (8,176 to 13,212) during the decade, the number of hands employed from 217,421 to 279,380, an increase of over 28 per cent. As the population had increased only about 18 per cent during the same period, it is evident that the factories were employing a considerably greater portion of the state’s inhabitants in 1870 than in 1860. The total value of manufactured products rose from $255,545,922 to $553,912,568 dur-

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99 This apparently great decline is probably due to a change in the method of making returns. Perhaps many of those given as “farm laborers” in 1860 were returned as “farmers” in 1865.
99 Report Boston Board of Trade, 1866, p. 72.
91 Ibid. p. 72.
92 U. S. Census, Reports, 1860, 1870.
93 From 1,231,066 in 1860 to 1,457,351 in 1870. U. S. Census Reports.
ing the ten years. According to the United States Census for 1870, goods worth $1,000,000,000 in 1860 would have been worth $1,560,000,000 in 1870. In other words, “the Superintendent is disposed to regard 56 per cent as a just statement of the increase in price for all classes of mechanical and manufacturing productions between 1860 and 1870.”

If the total value of manufactured products in 1860, $255,545,922 be multiplied by 1.56 the result will be slightly less than $400,000,000, which, subtracted from the valuation in 1870, gives an absolute increase of over a hundred and fifty million dollars during the decade. Business conditions were still unsettled, however, and it is probable that the profits of manufacturers were small. The total cost of raw materials rose (in currency values) over 147 per cent during the decade, while the total annual value of products rose only 117 per cent. The Report of the Boston Board of Trade for 1867 says that business men, with few exceptions, found their profits in 1866 less than they had found them for some years. The next year they speak of “extreme depression in all branches of business.” There is the same sort of complaint for 1869. “The manufacturer has found it difficult to obtain cost for his goods. We must, however, look for these fluctuations until all business transactions are conducted on a specie basis.” In 1870 conditions appear to have improved slightly, but, “small profits and strict economy in the sale and manufacture of goods is now the order of the day.”

Evidently prosperity had not been entirely reestablished at the end of the decade which we have been considering.

In general it seems safe to conclude that the thirteen years from 1857 to 1870 were a period of more or less economic depression in Massachusetts. The lowest point was touched in 1861 when the outlook was as black as it has ever been at any time in the history of the United States. Conditions in 1865

94 U. S. Census Reports, 1860, 1870.
96 From figures in U. S. Census Reports, 1860, 1870. $135,055,721 in 1860. $234,413,982 in 1870.
97 P. 42.
100 Report 1871, p. 138.
were undoubtedly better than they had been in 1861, but probably not as good as they had been in 1855. The restoration of confidence after the war brought a speedy revival of manufactures and a new demand for labor, but there was no great prosperity. The number of manufacturing establishments increased, and employment seems to have been steady, but wages were low during the five years after the war, and even with the encouragement given by the war-tariff, and the increased use of labor-saving machinery, profits were small. Massachusetts seems to have been slow in recovering from the financial crisis of 1857 and the political crisis of the sixties. Had she been an agricultural state it is probable that readjustment would, in both cases, have been more rapid.