

female working population, as well as for the family and the home. (Page 5.)

Report of the Maine Bureau of Labor Statistics, 1892.

Employers should realize that long hours at a severe tension are a cause of irritation among their employees, and they become ripe for almost any trouble, and trifles are often sufficient to precipitate violent strikes. The real cause of many of these strikes is overwork. (Page 11.)

(2) THE EFFECT OF WOMEN'S OVERWORK ON FUTURE GENERATIONS

Report of the Massachusetts Bureau of Labor Statistics, 1871.

14. Progressive physical deterioration produced by family labor in factories. It is well known that like begets like, and if the parents are feeble in constitution, the children must also inevitably be feeble. Hence, among that class of people, you find many puny, sickly, partly developed children; every generation growing more and more so.

15. Connection between continuous factory labor and premature old age. It is a fact, patent to every one, that premature old age is fully developed, in consequence of long hours of labor and close confinement. Very few live to be old that work in a factory. (Page 504.)

Proceedings of the French Senate, July 9, 1891. Arguments for a Ten-hour Day for Women.

The woman wage-earner, gentlemen, does not always live at the mill-gates; she is therefore obliged to make a half or three-quarters' hour journey before she arrives; consequently she will leave home at half-past five in the morning, only to return at half-past eight or nine o'clock in the evening. Is that living? Under such circumstances can a woman truly care for her children and her home? (Page 581.)

Report of the Maryland Bureau of Industrial Statistics, 1896.

Once inside the walls of the factory a weary day's work of ten hours' duration is begun, with an intermission for lunch at noon. . . .

When the day's work is at last over, the wearied crowd trooping from their place of employment hasten in all directions to their homes, which in many instances are in the extreme suburbs of the city. Once

home, they swallow a hasty supper and soon retire to a needed and deserved rest, with no pleasant anticipations for the morrow.

What lives are these for future wives and mothers? Future generations will answer. (Page 52.)

Report of the United States Industrial Commission, 1901.

Factory life brings incidentally new and depressing effects, which those whose experience has been wholly agricultural do not appreciate. But the experience of States which have pushed their way from agricultural to manufacturing industries, and have found that their delay in protecting their factory employees has weakened the physical and moral strength of the new generation of working people, would seem to be an experience which the citizens of new manufacturing States should hope to avoid. (Page 788.)

Report of the Committee on the Early Closing of Shops Bill, British House of Lords, 1901.

Sir W. MacComac, President of the Royal College of Surgeons:

And you can hardly expect that women who have been suffering from such long hours should become the mothers of healthy children?

That is what I ventured to hint. It must have an influence on their offspring undoubtedly.

. . . It is gradual and progressive in its effect, and it goes on, I am afraid, in a cumulative degree.

You mean that from generation to generation the population will become feebler and feebler, and less able to resist disease?

It must suffer from the influence of it, no doubt. (Page 119.)

Report of the Wisconsin Bureau of Labor Statistics, 1903-1904.

In certain fields of industry, like the manufacture of cotton goods or hosiery and knit goods, we may find the establishments paying the lowest wages, working their employees the longest hours, and under the worst sanitary conditions, temporarily driving out of the field of competition those establishments paying the best wages, working their employees a reasonable length of time surrounded by the best sanitary conditions; but if the process is allowed to continue, the nation tolerating it will certainly revert to a state of discontent, poverty, and crime, which no agency or force can overcome so well as wise factory legislation strictly and judiciously enforced. (Page 137.)

Besides this many eminent students of social conditions maintain

that in countries where industries have been allowed to run for centuries without any form of regulation, pauperism and crime are more prevalent than in those countries where regulation exists. Also, in countries where regulations have been imposed and withdrawn, misery and want have risen and fallen in almost direct proportion to the imposition and withdrawal of such regulation, and poor relief has ebbed and flowed in almost the same proportion. (Page 140.)

The Working Hours of Female Factory Hands. From Reports of the Factory Inspectors, Collated by the Imperial Home Office. Berlin, 1905.

The report for Würtemberg says, in regard to the injurious effect of factory work: "The children of such mothers — according to the unanimous testimony of nurses, physicians, and others who were interrogated on this important subject — are mostly pale and weakly; when these in turn, as usually happens, must enter upon factory work immediately upon leaving school, to contribute to the support of the family, it is impossible for a sound, sturdy, enduring race to develop." (Page 113.)

The Case for the Factory Acts. Edited by Mrs. SIDNEY WEBB.

The question arises, however, whether on philanthropic grounds alone individuals of mature years can be denied the right to work as long and as unhealthily as they like. The Acts of 1891 and 1895 show signs of a recognition, if a tardy one, that the real grounds of interference with industry are considerations of public health and safety. The old idea of protecting certain classes of workers because they are not "free agents" is more and more felt to be irrelevant, if not meaningless. There are still those who ask in astonishment, "May not a man, may not a woman, employ their capital or their labor as they choose?" But the State says, with a less and less hesitating sound, "Not under conditions wasteful of the life, or destructive of the efficiency, of those employed, or dangerous to the safety and well-being of the community." To this conclusion it has been driven by inquiry into the conditions of public health. (Page 122.)

The Case for the Factory Acts. Edited by Mrs. SIDNEY WEBB.

It may be enough for the individual employer if his workpeople remain alive during the period for which he hires them. But for the

continued efficiency of the nation's industry, it is indispensable that its citizens should not merely continue to exist for a few months or years, but should be well brought up as children, and maintained for their full normal life unimpaired in health, strength, and character. The human beings of a community form as truly a portion of its working capital as its land, its machinery, or its cattle. If the employers in a particular trade are able to take such advantage of the necessities of their workpeople as to hire them for wages actually insufficient to provide enough food, clothing, and shelter to maintain them and their children in health; if they are able to work them for hours so long as to deprive them of adequate rest and recreation; or if they subject them to conditions so dangerous or insanitary as positively to shorten their lives, that trade is clearly using up and destroying a part of the nation's working capital.

. . . Industries yielding only a bare minimum of momentary subsistence are therefore not really self-supporting. In deteriorating the physique, intelligence, and character of their operatives, they are drawing on the capital stock of the nation. And even if the using up is not actually so rapid as to prevent the "sweated" workers from producing a new generation to replace them, the trade is none the less parasitic. In persistently deteriorating the stock it employs, it is subtly draining away the vital energy of the community. It is taking from these workers, week by week, more than its wages can restore to them. A whole community might conceivably thus become parasitic on itself, or, rather, upon its future. (Page 20.)

History of Factory Legislation. HUTCHINS and HARRISON.

So far from being regarded as romantically philanthropic, like the ten-hour bill of 1844 . . . the bills of 1867 were taken as a matter of common sense and economic prudence. . . . Only a certain amount of work is to be got out of women and children in the twenty-four hours. . . . Nothing can be gained in the end by anticipating our resources, and to employ women and children unduly is simply to run in debt to Nature. (Page 167.)

Infant Mortality. A Social Problem. GEORGE NEWMAN, M. D.
London, 1906.

A nation grows out of its children, and if its children die in infancy, it means that the sources of a nation's population are being sapped, and further that the conditions that kill such a large proportion of

infants injure many of those which survive. Last year, 1905, there was a loss to the nation of 120,000 dead infants, in England and Wales alone, a figure which is almost exactly one quarter of all the deaths in England and Wales in that year. (Page 2.)

And this enormous sacrifice of human life is being repeated year by year and is not growing less. (Page 7.)

Nor is England alone. . . . The birth rate is declining in civilized nations with few exceptions; and the same may be said of the death rate. But the infant mortality rate, as a rule, is stationary or even increasing.

There are two features, however, which appear to be common to the high infant mortality districts, namely, a high density of population and a considerable degree of manufacturing industry." (Page 26.)

II. SHORTER HOURS THE ONLY POSSIBLE PROTECTION

This needed protection to women can be afforded only through shortening the hours of labor. A decrease of the intensity of exertion is not feasible.

Report of the United States Industrial Commission, 1901.

It is certain that any programme for reducing this intensity of exertion must fail. The entire tendency of industry is in the direction of an increased exertion. Any restrictions on output must work to the disadvantage of American industry, and the employers are often right in their demand, usually successful, that such restrictions be abandoned. This being true, there is but one alternative if the working population is to be protected in its health and trade longevity, namely, a reduction of the hours of labor. (Page 763.)

Industrial Conference . . . of the National Civic Federation, New York, 1902.

The factory system makes this (shortening hours) more and more necessary in proportion as it is perfected in its mechanism. It becomes all the time more and more exacting. The greater the perfection of the machinery or the method, the more attention is required. . . . (Page 173.)

And whatever is necessary to make the most of the machinery is important to the successful conduct of the industry. If that makes the laborers tired, then, so far as the employer is concerned, they must be tired; if it calls for too much strenuous attention, too much nerve exhaustion, then the nerve exhaustion must come or the machinery is a failure. The remedy for this cannot be found in slackening up on the demands for economic output and effectiveness in the machinery. . . . The remedy for that must come on the other side, shortening the day, not slackening the effort. The tension may not be lessened, but the hours may be reduced. The exhaustion on the laborer must be avoided, but it cannot be avoided by reducing production . . . they (employers) find that modern business is more exacting than ever and . . . that to slacken is to fail. Consequently they find that long vacations are necessary to avoid physical exhaustion. But long vacations are impossible for laborers . . . they must have relief by lessening the duration of the pressure every day. (Page 174.)

III. THE GENERAL BENEFITS OF SHORT HOURS

History, which has illustrated the deterioration due to long hours, bears witness no less clearly to the regeneration due to the shorter working day. To the individual and to society alike, shorter hours have been a benefit wherever introduced. The married and unmarried working woman is enabled to obtain the decencies of life outside of working hours. With the improvement in home life, the tone of the entire community is raised. Wherever sufficient time has elapsed since the establishment of the shorter working day, the succeeding generation has shown extraordinary improvement in physique and morals.

A. *Good Effect on the Individual Health, Home Life, etc.*

Report of the Massachusetts Bureau of Labor Statistics, 1871.

Their hours of labor should not exceed ten hours per day, for, as we have seen, 85 + per cent of the working girls of Boston do their own housework and sewing either wholly or in part, and this homework must be done in addition to that performed for their employers. (Page 558.)

Report of the British Chief Inspector of Factories and Workshops, 1877.

Ten years ago, when I made the first effort to introduce the Factory Acts in London, I was frequently met with the statement on the part of employers that the tendency of the Act would be to encourage prostitution, because by giving the women an enforced leisure they would be exposed to additional temptation. I was loath to believe any such theory, and I am glad to say that, so far as my experience during the last ten years goes, the fears thus expressed have never been realized. There has been quite a revolution during that period in the conditions on which seamstress work is carried on in the metropolis. The employment of them in workshops and fac-

tories has increased enormously, but I can find no employer willing to commit himself to the opinion that in their respective classes there has been any deterioration in the character and the conduct of the workpeople. All the evidence indeed which I have obtained goes to establish the contrary. (Page 14.)

Report of the New York Bureau of Labor Statistics, 1900.

The wife's life is darkened even more by the long-hour day, especially if she also be a working woman. Even if the day be one of only ten hours, she must arise as early as five o'clock to prepare breakfast for her husband and herself, so that they may be at their work places at seven. Beginning at that early hour her day will be a very long one. (Page 69.)

The Working Hours of Female Factory Hands. From reports of the Factory Inspectors collated by the Imperial Home Office. Berlin, 1905.

The inspector for Upper Bavaria dwells upon the advantage accruing to the health of working-girls as follows:

"In the matter of health the shortening of the working hours is of unusual value, because for them free time is not resting time, as it is for a man. For the working-girl on her return from the factory there is a variety of work waiting. She has her room to keep clean and in order, her laundry work to do, clothes to repair and clean, and, besides this, she should be learning to keep house if her future household is not to be disorderly and a failure." (Page 111.)

Many inspectors urge the need of shortening the hours of labor on grounds of morality. From Offenbach it is reported: "The period before marriage is the time for learning the future profession, but during this period the factory worker is exposed to strain and fatigue, which hinder her bodily development and deprive her of educational opportunity. Desirable, therefore, would be a reduction of the working hours which should give to married women more time for their housework and family life, and to the younger unmarried women the opportunity to learn the art of home-making, because upon this the health, welfare, and prosperity of her whole family will depend." (Page 113.)

B. *Good Effect on the General Welfare*

Report of the British Chief Inspector of Factories and Workshops, 1859.

"I think I can show that the Factory Acts have put an end to the premature decrepitude of the former long-hour workers; that they have enlarged their social and intellectual privileges; that by making them masters of their own time they have given them a moral energy which is directing them to the eventual possession of political power; and that they have lifted them up high in the scale of rational beings, compared with that which they had attained in 1833. Moreover, I think I can further prove that all this has been accomplished without any prejudice whatever to our commercial prosperity. . . .

There is no need to raise again to public view the crooked and attenuated creatures of that bygone period. . . . The "factory leg" and the "curved spine" were a proverb and a reproach. . . .

How happily then may we turn to the contemplation of it in 1859! The proverb has died a natural death, and the reproach is all but taken away. There is scarcely now to be seen in any of the manufacturing districts a crooked leg or a distorted spine as the result of factory labor. . . .

The physical condition of the future mothers of the working classes may be challenged to meet that of any mothers of any country." (Page 47.)

Report of the Massachusetts Bureau of Statistics of Labor, 1873.

ON RESULTS OF TEN-HOUR LABOR LAW IN ENGLAND.

Lord Ashley said: Upon the good moral and social influence of the change, the testimony is most favorable from the clergymen and school teachers throughout Yorkshire and Lancaster. How have the women used their time? Hundreds of them are attending evening school, — learning to read and write and to knit and sew, things that they could not have learned under the twelve-hour system.

A burial society testifies to the diminution of burial although the cholera was upon the town, and that the diminution was among children under five years of age, and he assumes as a reason that mothers can get home earlier and give that attention to children which no hired nurse can ensure.

The Catholic priests at Stockport and Bolton testify that the number of factory workers attending schools has more than doubled,

and that there was not the slightest doubt that the moral, social, and physical condition of the people had improved. (Page 491.)

Report of the New Jersey Bureau of Statistics of Labor and Industry, 1886.

The Factory Acts were believed to be the death-blow to English manufactures, and they have made labor more efficient, more intelligent, more decent, and more continuous without trenching on profits.

In 1851 and 1852 those who advocated that ten hours should be a legal day's work were denounced as demagogues, and the ten-hour plan as a humbug which could only tend to reduce the wages proportionately, while all kinds of evil results were sure to follow its application, especially to agricultural labor. But we have seen ten hours become the rule; wages have not fallen, and many of those who prophesied disaster are now as loud in their praises of its beneficence as the friends of the change. (Page 231.)

Report of the Massachusetts Chief of the District Police, 1889.

The good results of shortening the hours of labor were soon apparent, in the substantial disappearance of discontent among those affected thereby; in the maintenance of the standard of factory productions, both as to quantity and quality; and in placing Massachusetts in the lead, where, by her history and her aspirations, she rightfully belonged.

. . . If experience has shown anything in this matter, it has been the wisdom and statesmanship of the body of laws in our Public Statutes and additions thereto, which are known as industrial legislation. It is sixteen years since the ten-hour law was enacted; and it is entirely safe to say that, if it were stricken from the statutes to-day, not an influential voice would be raised within our borders in favor of the restoration of the order of things which that law changed. The increase of public interest in matters of this kind is a very significant fact. (Page 7.)

Report of the Illinois Chief Inspector of Factories, 1895.

In England the principle of the regulation of the hours of work of women and children has been established for more than a generation; and the regeneration of the working class in that country, from the

degradation in which it was sunk in 1844, is attributed to the Factory Acts, and especially to this essential feature of them. (Page 5.)

French Review of Hygiene and Sanitary Police. Vol. XVIII. 1896.

All the world knows well that there is much to do, and that, if our legislation has already bettered conditions, new ameliorations are desirable, but they will come, I think, only through the pressure of public opinion, . . . which will become exacting . . . when doctors have made clear the utility of a protection which regards not only the woman, but, secondarily, the child to be born by her; when it knows better that to protect the mother is an absolute necessity for the future of the race. (Page 193.)

Report of the New York Bureau of Labor Statistics, 1900.

But the good accomplished by each successive factory law was so clearly apparent, that even capitalistic Parliament could not refuse to continue the policy of labor protection. The evidence that this policy wrought a revolutionary change in the amount of crime, pauperism, and misery is superabundant; but it is too familiar to warrant repetition now. (Page 49).

The best evidence of the overwhelming success of the short-hour law from all points of view is afforded by the complete conversion of its opponents. Thus it came to pass that in 1860, when a bill was introduced to extend the ten-hour law to other branches of the textile industry, J. A. Roebuck, who had originally opposed with bitterness this kind of legislation, made the following recantation:

“I am about to speak on this question under somewhat peculiar circumstances. Very early in my parliamentary career Lord Ashley, now the Earl of Shaftesbury, introduced a bill of this description. I, being an ardent political economist, as I am now, opposed the measure, . . . and was very much influenced in my opposition by what the gentlemen of Lancashire said. They declared that it was the last half-hour of the work performed by their operatives which made all their profits, and that if we took away that last half-hour we should ruin the manufacturers of England. I listened to that statement and trembled for the manufacturers of England [a laugh]; but Lord Ashley persevered. Parliament passed the bill which he brought in. From that time down to the present the factories of this country have been under State control, and I appeal to this House whether the manufacturers of England have suffered by this legislation.”

Sir James Graham, another persistent antagonist of the short-hour laws, followed Mr. Roebuck with a similar recantation:

"I am sorry once more to be involved in a short-time discussion. I have, however, a confession to make to the House. . . . Experience has shown to my satisfaction that many of the predictions formerly made against the factory bill have not been verified by the result, as, on the whole, that great measure of relief for women and children has contributed to the well-being and comfort of the working classes, while it has not injured their masters. The enactment of the present bill ought to approach as nearly as possible the Factory Act. . . . By the vote I shall give to-night, I will endeavor to make some amends for the course I pursued in earlier life in opposing the factory bill." (Page 51.)

All travellers unite in testifying to the wonderful energy displayed in their work by the wage-earners of Australia. Such energy is a product not so much of the stimulating climate as the high standard of comfort made possible by the short working-day. Considerable evidence might be adduced in support of the following enthusiastic opinion of John Rae ("Eight Hours for Work," page 312).

The more we examine the subject the more irresistibly is the impression borne in from all sides that there is growing up in Australia, and very largely in consequence of the eight-hour day, a working class, who, for general morale, intelligence, and industrial efficiency is probably already superior to that of any other branch of our Anglo-Saxon race, and for happiness, cheerfulness, and all-around comfort of life has never had its equal in the world before. (Page 59.)

Report of the United States Industrial Commission, 1901.

Lessening of hours leaves more opportunity and more vigor for the betterment of character, the improvement of the home. . . . For these reasons the short work-day for working people brings an advantage to the entire community. (Page 773.)

Night-work of Women in Industry. PROF. ETIENNE BAUER. Jena, 1903.

Above all, there is perceptible in all the countries in which women are protected, a reduction in the mortality both of women and of children.

For England the convincing argument on this point has often been produced. There, since the establishment of the normal working

day the mortality figures for working-women have fallen much lower than those for men. This proportion was as follows: 1841-1850, 23.11 per cent for men, 21.58 per cent for women. From 1881-1890, 20.22 per cent for men, 18.01 per cent for women.

The diminution in the two figures taken together is to be attributed to the great advance in hygiene achieved in the interval, and the relatively greater decrease in the mortality of women is to be attributed to the protective legislation. (Page 37.)

Report of the Wisconsin Bureau of Labor Statistics, 1903-1904.

No private individual has any more moral right to exhaust the working energy and working capital of a nation without giving "value received" than he has to take the life of an employee outright. The only difference is that one is a slower criminal process than the other. It is not enough that workmen should obtain barely enough for their labor to enable them to live, but they should receive a competency. They should receive as much energy from their employers in food, clothing, homes, and furnishings amid healthful surroundings as they give to their employers in the articles they produce.

The stronger, healthier, and more intelligent a laborer is, the more wealth he represents. The laborers of a nation represent its working capital just as the hands of the farmer, his horse, or his ox represent his working capital. And the stronger and healthier either may be, the more capital it represents. The more efficient this capital becomes, the more wealth will be produced. Machinery operators represent the working capital of the manufacturer, and he owes it to the nation which protects him in his business to do everything in his power to increase this working capital and keep it in the highest possible state of efficiency. (Page 129.)

The regulation of factories either by law or by special agreement worked marvellous changes in England. In the course of half a century the "sweated" laborers of this great country whose course of life seemed almost run became energetic, self-reliant, intelligent, and efficient workers, owning their own homes, amid wholesome surroundings, and working a reasonable number of hours for a day's work.

Not only is factory legislation sound in principle, but wherever put to the test it has been found sound in practice as well. (Page 137.)

History of Factory Legislation. HUTCHINS and HARRISON.

In 1861 the president of the Economic Section of the British Association could say in his address that the results of that bill (ten-hours bill) were "something of which all parties might well be proud. There is in truth a general assent that if there has been one change which more than another has strengthened and consolidated the social fabric in this part of the island, has cleared away a mass of depravity and discontent, has placed the manufacturing enterprise of the country on a safe basis, and has conferred upon us resources against the effects of foreign competition which can scarcely be overvalued, it is precisely the changes which have been brought about by the sagacious and persevering and successful efforts to establish in manufacturing occupations a sound system of legal interference with the hours of labor. (Page 122.)

The Case for the Factory Acts. Edited by MRS. SIDNEY WEBB.

The two great industries which, at the beginning of the nineteenth century, were conspicuous for the worst horrors of sweating were the textile manufactures and coal-mining. Between 1830 and 1850 the parliamentary inquiries into these trades disclosed sickening details of starvation wages, incredibly long hours, and conditions of work degrading to decency and health. The remedy applied was the substitution, for individual bargaining between employer and operative, of a compulsory minimum set forth in common rules prescribing standard conditions of employment.

. . . What was the result? Fortunately, there is no dispute. Every one who knows these great industries agrees in declaring that the horrors which used to prevail under individual bargaining have been brought to an end. The terms "cotton-operative" and "coal-miner," instead of denoting typically degraded workers, as they did in 1830, are now used to designate the very aristocracy of our labor. And when, to-day, those who are interested in the industrial progress of women need an example of a free and self-reliant class of female wage-earners, earning full subsistence, enjoying adequate leisure, and capable of effective organization, they are compelled to turn to the great body of Lancashire cotton-weavers, now for half a century "restricted" in every feature of their contract. (Page 36.)

IV. ECONOMIC ASPECT OF SHORT HOURS

A. *Effect on Output*

The universal testimony of manufacturing countries tends to prove that the regulation of the working day acts favorably upon output. With long hours, output declines; with short hours, it rises. The heightened efficiency of the workers, due to the shorter day, more than balances any loss of time. Production is not only increased, but improved in quality.

(1) SHORTER HOURS INCREASE EFFICIENCY, AND THUS PREVENT REDUCTION OF OUTPUT

Report of the United States Industrial Commission, 1900.

Those States which are just now advancing to the position of manufacturing communities might well learn from these examples the lesson that permanent industrial progress cannot be built upon the physical exhaustion of women and children. . . . A reduction in hours has never lessened the working-people's ability to compete in the markets of the world. States with shorter work-days actually manufacture their products at a lower cost than States with longer work-days. (Page 788.)

History of Factory Legislation. HUTCHINS and HARRISON.

Bleachers in a petition to their employers, 1853: We believe the result generally is such as to corroborate our statement that short hours produce more work and that of a better quality than under the old system. (Page 132.)

Massachusetts Bureau of Statistics of Labor. 1872.

The testimony of those who have adopted the shorter time is almost unanimous in its favor. Many reported an improved condition of the employees. No instance is given of decreased wages, though many report an increase, not only in wages, but in production. All of the arguments against reduction made by those working eleven hours and over are answered by those who have adopted the shorter time, and worked under that system for years. The advocates of eleven hours have utterly failed to sustain themselves in their continued adhesion to a system that England outgrew twenty-two years ago; a system unworthy of our State and nation, and one that would not last a month if the victims of it were men instead of women and children, as most of them are. (Page 240.)

Massachusetts Bureau of Statistics of Labor. 1873.

The overseer (of Pemberton Mills, Lawrence) informed us that they took the result of every half-hour's work, and upon inquiring the relative product of the different hours, he assured us that invariably the last hour was the least productive. (Page 246.)

Hon. William Gray, Treasurer of the Atlantic Mills, Lawrence, began the ten-hour experiment with the operatives in his employ, June, 1867, and his testimony concerning its practical and financial success may be regarded as nearly, if not quite, authoritative and decisive. Ten and three-fourths hours had been the running time of this mill previous to this date. The result of this reduction is substantially as follows:

In three and a half years from the time of the change, the product of the hours was fully equal to the product of ten and three-fourths hours, and this was accomplished with old machinery that had been running for twenty years with very little change.

With no material change in machinery, these results appear.

First. An improvement in the operatives directly after adopting ten hours, — which improvement has been going on; and they now have the best set of workers that have been in the mills for fifteen years, this being the opinion of the agent and overseers, as well as the treasurer. (Page 495.)

Factory and Workshops Act Commission, 1875. British Sessional Papers, 1876. Vol. XXX.

Testimony of Phillip Grant, representing operatives:

During the agitation for the ten-hours bill in the year 1844 or 1845, he (a cotton-spinner at Preston) reduced his time voluntarily to eleven hours instead of twelve, and at the end of twelve months he reported, as Mr. Hugh Mason did, that he had got a better quality of work and more of it in the eleven hours than he had in the twelve, and that is obvious to anybody who understands the process of following a machine. (Paragraph 8582.)

Report of the British Factory Inspector, 1877.

The women at the close of the twelve hours, which period constitutes the usual day's work, were tired and exhausted, and hardly did enough after that to pay for the gas consumed. Book sewers and folders are all paid by piecework, and if overtime were continued for a few weeks together their earnings would soon fall to about the same amount as when they worked the regular hours.

Report of Massachusetts Bureau of Statistics of Labor, 1881.

It is apparent that Massachusetts with ten hours produces as much per man or per loom or per spindle, equal grades being considered, as other States with eleven and more hours; and also that wages here rule as high, if not higher, than in the States where the mills run longer time. (Page 457.)

But perhaps the most emphatic testimony is that of another carpet mill employing about twelve hundred persons. This mill, which has been running but ten hours for several years, and has during this period tried the experiment of running overtime, gives the following results. The manager said, "I believe, with proper management and supervision, the same help will produce as many goods, and of superior quality, in ten hours as they will in eleven. I judge so from the fact that during certain seasons, being pushed for goods, we have run up to nine o'clock, and for the first month the production was increased materially. After this, however, the help would grow listless, and the production would fall off and the quality of the goods deteriorate." (Page 460.)

The reason is, the flesh and blood of the operatives have only

so much work in them, and it was all got out in ten hours, and no more could be got out in twelve; and what was got extra in the first month was taken right out of the life of the operatives. (Page 461.)

Report of the Connecticut Bureau of Labor Statistics, 1886.

Down to a certain point, the nations who work shorter hours not merely do better work, but more work than their competitors. In Russia the hands work twelve hours a day; in Germany and France, eleven; in England, nine. Yet nine hours a day of English work mean more than twelve hours of Russian work.

The laborer receives better wages, and at the same time the manufacturer gets a larger product — so much larger that it is the Russian, the German, or the Frenchman who requires protection against his English competitor in spite of the longer hours and lower day's wages. (Page 16.)

Report of the German Imperial Factory Inspectors, 1886-1887.

Report for Mittel and Unter Franken:

It has been repeatedly shown that a shortening of the working day does not lessen the value of the work done, because owing to the effort to prevent a decrease in the income, the shorter time is more profitably used. (Page 86.)

Belgium. Commission du Travail, 1886. Report of the Sessions of Inquiry into Industrial Labor. Brussels, 1887.

But it is shown that everything which makes the worker more strong, more healthy, more energetic, more intelligent, etc. (and these will be the results of greater leisure, and the observance of rules prescribed for hygiene, upon the subject of the hours of labor and rest), make him also more productive. Therefore the introduction of reforms indicates strongly that the final result will be a very great increase of production with a shorter time period for work. (Page 65.)

International Conference in Relation to Labor Legislation. Berlin, 1890.

Alone, the nations hesitate to reduce the hours of work for fear of competition, although, with modern machinery, experience has abundantly proved that the countries with the shortest working day

attain the maximum of production. These are the countries that produce under good conditions most cheaply; that are most prosperous, and most feared as competitors in the world's markets. (Page 88.)

Report of the Maine Bureau of Labor Statistics, 1890.

In my State, since the adoption of the ten hours in lieu of the eleven hours in mills and factories where machinery is employed, it is the universal verdict of manufacturers that their product is as great under the ten-hour system as it was under the eleven-hour system, and I think that the same answer comes from every State that has adopted the ten-hour system.

Conditions of Female Labor in Toronto, by JEAN THOMSON SCOTT. Toronto, 1891.

Experts say that the cost of production in the cotton trade is actually the lowest where the wages are the highest and the hours shortest. Dr. Schulze Gaevernitz shows this specifically, because the standard of living of the workers has been raised and with it their general intelligence, enabling them to do more in a shorter time — what I have called "intensive work."

. . . That is the opinion of experts on the trade throughout the world. They say that all over the world the cost of production is lowest where wages are highest and hours shortest. (Page 44.)

Report of the German Imperial Factory Inspectors, 1893.

In most establishments the working day was eleven hours, not seldom the ten-hour day was introduced. The shorter day turned out well in all cases. (Liegnitz.)

In a cigar-box and wrapper-mold factory all adult workers were given uniform working hours in summer and winter, — a nine-hour day, from seven to six, with two hours free time at noon. The owner asserts that in this shorter time no less work is done than formerly in the longer time, the eleven-hours day. (Kassel.) (Page 155.)

Report of the Imperial German Factory Inspectors, 1893.

The week workers expressed anxiety in many cases lest their wage be cut after the new regulations took effect, but our observation is that, in most cases, the pay of the women wage-earners remained unchanged. (Page 155.)

Report of the Connecticut Bureau of Labor Statistics, 1893.

As to the effect of reducing the working time to nine hours daily, no inquiry was made, but several employers stated voluntarily to agents of the bureau that their experience proved to them that production was as large in nine hours as it had been in ten. (Page 28.)

Report of the German Imperial Factory Inspectors, 1895.

The report of amount and value of the work done in the reduced working day are also of interest. The fact that the value of the work is not in proportion to the hours of work is but slowly understood. A wool factory reduced their working day by one hour, in accordance with the law of June 1, 1891; subtracting the rest periods, it now amounts to ten and one-half hours. The owners assert that the amount and value of work done by both males and females remains the same, while calls upon sick fund have greatly diminished. (Page 370.)

Report of the German Imperial Factory Inspectors, 1898.

In one laundry in Plauen, where the hours of the workers have been reduced from eleven to ten hours, it has been proved that the women accomplish fully as much as before this reduction. In a jute spinning and weaving factory in Cassel the ten-hour day was provisionally introduced at the request of the hands in September. Thus far it has worked so well that the shorter day will probably be retained. (Page 106.)

Report of New York Bureau of Labor Statistics, 1900.

Fortunately, statistics are at hand which afford simple but fairly effective tests of the assertion that Massachusetts industries are threatened with ruin by restrictive labor legislation. In the first place, Massachusetts' cotton industry, the business chiefly affected by short-hour laws, has fully kept pace with that of rival States in the North.

Certain facts appear with distinctness, one of which is that the cotton industry of Massachusetts has not only grown steadily throughout the period of short-hour legislation, but — what is far more impressive — has made larger gains than are shown by the adjacent States with less radical short-hour laws. In 1870, four years before the enactment of the ten-hour law, Massachusetts had 39.5 per cent of all the cotton spindles in the North Atlantic States; six years after the passage of that law Massachusetts' proportion was 45 per cent;