

cerned. Now, I feel it important or desirable to give just one illustration to show that an increase in output does not throw men out of work, and I could give thousands, simply thousands, of such illustrations.

Take any trade, go back through the history of it, and see whether increase of output on the part of the workman has resulted in throwing men out of work. That is what people generally believe; that is what these working people who have testified here believe. They believe if they were to increase their output it would result in throwing a lot of them out of their jobs. And I have had much sympathy with the workmen who have testified before your committee, because I feel that they firmly believe that it would not be for their best interests to turn out a larger output. I believe these men are honestly mistaken, just as the rest of the world has been honestly mistaken in many other instances.

Let us examine the actual facts in one trade—the cotton trade, for instance. It is as well known, perhaps, and as well understood as any trade in the whole list. The power loom was invented some time between 1780 and 1790, I think it was; I am not quite sure about that date, but it was somewhere about that time. It was very slow in coming into use. Somewhere about the year 1840—the exact date is immaterial, and I give that as about the time of the occurrence—there were in round numbers 5,000 cotton weavers in Manchester, England. About that time these weavers became convinced that the power loom was going to win out, that the hand looms which they were operating were doomed. And they knew that the power loom would turn out per man about three times the output. That is a general figure. I do not wish to say that this ratio is exact, but in any case it is nearly so. Those men knew the possibilities of the power loom and realized that when it was introduced it would turn out a very much larger output per man than was being then turned out by the hand loom.

Now, what could they see? They were certain, those men were honestly certain, and it was a natural conviction on their part, that nothing could happen through the introduction

of this power loom except that after it was in, after it was fully installed and doing three times the work that the hand loom did, that instead of there being 5,000 weavers in Manchester they would be reduced to 1,500 or 2,000, and that 3,000 weavers would be thrown out of a job. Now, those men felt fully convinced of that; with them there was no doubt about it; it was a matter of certainty, and they did in kind just what all of us would be apt to do in kind if we were convinced that three-fifths of our working body were to have our means of livelihood taken away from us. What I mean to say is that, broadly speaking, we would adopt the same general policy of opposition that they adopted. I am not advocating violence, arson, or any of the wrong things that were done by these men when I say that we would in a general way have done, broadly speaking, what they did. We would have opposed the introduction of any such policy by every means in our power. What the Manchester weavers did was to break into the establishments where these power looms were being installed. They smashed up the looms. They burned down the buildings in which they were being used. They beat up the scabs using them, and they did almost everything that was in their power to prevent the introduction of the power loom.

And even after that exhibition of fearful violence, gentlemen, I do not hesitate to say that I do not feel very bitterly toward those men. I believe that they were misguided. I feel a certain sympathy for them, not in their violence—I do not endorse that for one moment—but I cannot help but feel a certain sympathy for the men who believe, with absolute certainty, that their means of livelihood is being taken away from them. You cannot help but feel sympathy for men who believe that, even if you thoroughly disapprove of their acts. I do not want to be misquoted in this. These men did murder, violence, and arson. I do not believe in anything of that sort under any circumstances.

Now, gentlemen, the power loom came into use just as every labor-saving device that is a real labor-saving device is sure to come at all times. In spite of any opposition that may come

from any source whatever, I do not care what the source is, I do not care how great the opposition, or what it may be, any truly labor-saving device will win out. All that you have to do to find proof of this is to look at the history of the industrial world. And, gentlemen, scientific management is merely the equivalent of a labor-saving device; that is all it is; it is a means, and a very proper and right means, of making men more efficient than they now are, and without imposing materially greater burdens on them than they now have, and if scientific management is a device for doing that it will win out in spite of all the labor opposition in the world; in spite of any opposition that may be brought to bear against it from any quarter whatever, from any class of people, or from the whole people, it will win out. If scientific management is right, and I believe it is right; if it is a labor-saving device for enabling men to do more work with no greater effort on their part, then it is going to win out.

Now, let us see what happened from the introduction of the power loom in 1840, or thereabouts. Did it throw men out of work; did it make work for a less number of men? In Manchester, England, now—and, again, the figures I am giving are merely the broadest kind of general figures, as I am not personally familiar with the cotton industry. The data I have has been given to me by a man who is familiar with it, but I do not want to quibble over the exact figures, as they are not material. It is the broad general facts that count. In Manchester, England, today, the average weaver turns out, I am told, from 8 to 10 times the yardage of cotton cloth formerly turned out by the old hand weaver; the man who does his work with this modern machinery turns out 8 to 10 times the yardage formerly turned out by the hand weaver. The man who told me of the conditions said these figures were well within the limit. In Manchester, England, in 1840, there were 5,000 operatives, and in Manchester, today there are 265,000 operatives. Now, in the light of those figures has the introduction of the power loom, has the introduction of labor-saving machinery thrown men out of work?

What has happened in the cotton industry is

typical of what happens in every industry, it makes no difference what that industry is. Broadly speaking, all that you have to do is to bring wealth into the world, and the world uses it. Now, real wealth, as you all know, has but very little to do with money; money is the least important element in wealth. The wealth of the world comes from two sources—from what comes out of the ground, or from beneath the surface of the earth, on the one hand, and what is produced by man on the other hand. And the broad fact is that all you have to do is to bring wealth into the world and the world uses it. This is just what happened in the cotton industry.

If you will multiply the figures given in the Manchester illustration you will see that in each day now in Manchester there are 400 or 500 yards of cotton cloth coming out for every single yard that came out each day in 1840, whereas the population of England certainly has not more than doubled; I do not know exactly, but my impression is that it has not more than doubled since 1840. Suppose we even granted that it has trebled and the fact would still be astounding that there now comes out of Manchester, England, 400 to 500 yards of cotton cloth for every single yard that came out in 1840. The true meaning of this great production is that just that much more wealth is being unloaded on the world. This is the fundamental meaning of increase in output in all trades, namely, that additional wealth is coming into the world. Such wealth is real wealth, for it consists of those things which are most useful to man; those things that man needs for his everyday happiness, for his prosperity, and his comfort. The meaning of increased output, whether it be in one trade, or another, is always the same, the world is just receiving that much more wealth.

Let us see, now, in a definite way what the increased output of cotton goods means to the American workman. None of us probably appreciate now that in 1840 the ordinary cotton shirt or dress made, for example, from Manchester cottons was a luxury to be worn only by the middle classes, as the English describe it, and that cotton goods were worn by the poor people only as a rare luxury. Now the