The Chairman. Would you state, for the information of the committee, how you developed this system, when you developed it, where you developed it, and what the essential features of it are when developed, and state it in your own way?

Mr. Taylor. Mr. Chairman, before beginning with the early steps which were taken and which led toward the development of scientific management, I should like to attempt to make it clear what the essence of scientific management is; what may be called the atmosphere surrounding it; the sentiments which accompany scientific management when real scientific management comes to exist, and which are appropriate to it; I wish to make clear those sentiments, on the one hand, which come to be most important for those on the management's side, and those sentiments, on the other hand. which come to be the essence and most important to the men working under scientific management, because a mere statement of details and of various steps taken one after another in developing the system, unless one understands the goal toward which they are converging, is apt to be misleading rather than enlightening.

The most important fact which is connected with the working people of this country and which has been forced upon my attention possibly more during the past year than it has in former years, is the fact that the average workingman believes it to be for his interest and for the interest of his fellow workmen to go slow instead of going fast, to restrict output instead of turning out as large a day's work as is practicable.

Now, I find that this fallacy is practically universal with workingmen, and in using the term "workingmen" I have in mind only that class of workmen who are engaged in what may be called cooperative industries, in which several men work together. To illustrate, I have not in mind the coachman, the gardener, or the isolated workman of any kind! I do not mean to say that men outside the cooperative trades believe it to be for their best interest and for the best interest of their fellow workmen to go slow, but I do say that those engaged in cooperative trades generally so believe. Therefore, in using the word "workman" I hope it will

be understood that I am referring simply to that group of men cooperatively engaged, and that is rather a small group of men in any community. We who are engaged in cooperative industry have somehow gotten the impression that the whole world is engaged in the same sort of work, but the class of which I speak forms a rather small minority, but, nevertheless, a very important element of the community.

When you get almost any workingman to talking with you intimately and saying exactly what he believes and feels without reserve; I mean when he speaks without feeling that he is going to meet with an antagonistic opinion not in sympathy with him; to put this in still a third way, when you get that man to telling his real views, he will almost always state that he cannot see how it could be for the interest of his particular trade—that is, for the interest of those men associated with him, and with whose work he is familiar—to very greatly increase their output per day.

The question the workman will ask you, if you have his confidence, is: "What would become of those of us in my particular trade who would be thrown out of work in case we were all to greatly increase our output each day?" Each such man in a particular working group feels that in his town or section or particular industry there is, in the coming year, only about so much work to be done. As far as he can see, if he were to double his output, and if the rest of the men were to double their output tomorrow or next week or next month or next year, he can see no other outcome except that one-half of the workmen engaged with him would be thrown out of work.

That is the honest viewpoint of the average workman in practically all trades. And let me say here that this is a strictly honest view; it is no fake view; there is no hypocrisy about it. This is a firm conviction on the part of almost all workingmen. Holding those views and acting upon them, the workmen cannot be blamed for impressing upon other workmen their conviction that it is not for their mutual interest to greatly increase the output in their particular trade. And as a result they almost all come to the conclusion that it would be humane, it would be a kindly thing, it would be

acting merely in the best interests of their brothers, to restrict output rather than to materially increase their output.

Now, I think that is the view of the great majority of the workingmen of this country, and I do not blame them for it. I think I may say that for the almost universality with which this view is found among warkingmen, and still more for the fact that the view is growing instead of diminishing, that he men who are not themselves working in cool erative industry and who belong, we will say taking a single example, to the literary classes, men who have the leisure time for study and investigation and the opportunity for knowing better, are mainly to blame. Some one is surely to blame for the fact that workingmen hold this view, because it is a fallacy which some one should have taken the trouble to point out long ago. This view is directly the opposit of the truth. This view is false from beginning to end, and I say again that for this fallacis on the part of the working people the men ho have the leisure and the opportunity to edicate themselves, the men whose duty it is on ought to be-to see that the community is properly educated and told the truth, are mainly to blame. I know of very few men in this country who have taken the trouble to bring out the truth of this fact and make it clear to the working people.

On the contrary, the men who are immediately in contact with the workmen-most of all the labor leaders-are teaching the workmen just the opposite of the facts in this respect, and yet I want to say right here, gentlemen, that while I shall have to say quite a little in the way of blame as to the views and acts of certain labor leaders during my talk, in the main I look upon them ar strictly honest, upright, straightforward med. I think you will find as many good men aming them as you will in any class, but you will also find many misguided men among them, r en whose prejudices are carrying them away in the wrong direction, just as you will find with hen of other classes. And please note here that am using the words "class" or "classes" throu hout in the sense of groups of men and women with somewhat similar aims in life, and not a all with the "upper and lower class" distinctions which are some-

times given to these words. So that when I say the labor leaders are misdirecting their followers, are giving them wrong views, are teaching wrong doctrines to their men, I say this with no idea of imputing wrong motives to labor leaders. They themselves are as ignorant of the underlying truths of political economy as the workmen whom they are teaching. I say this quite advisedly because I have talked with a great many of them and I find that they are as firmly convinced of the truth of this fallacy as to the restriction of output as the workmen themselves. Therefore, I repeat again, the teaching of this doctrine by almost all labor leaders is the result of honest conviction and not of any less praiseworthy motive.

of any less praiseworthy motive.

And yet, in spite of the fact that nearly all

labor leaders are teaching this doctrine, and that almost no one in this country is giving much, if any, time to counteracting the evil effects-and they are tremendous-of this fallacy, that it is for the interest of the workman to go slow. In spite of this fact, I may say that all that is necessary to do to prove the direct contrary of this fallacy is to investigate the facts of any trade, whatever that trade may be. I do not care what trade you go into, get back to the basic facts, the fundamental truths connected with that trade, and you will find that every time there has been an increased output per individual workman in that trade produced by any cause that it has made more work in the trade and has never diminished the number of workmen in the trade. All you have to do is to go back into the history of any trade and look up the facts and you will find it to be true; that in no case has the permanent effect of increasing the output per individual in the trade been that of throwing men out of work, but the effect has always been to make work for more men.

Now, that is the history of every trade, but in spite of that fact the world at large; both on the workman's side and on the manufacturer's side believes this fallacy (and I find a great many men who ought to know better completely misinformed on the side of the management). And yet this is a fallacy, and a blighting fallacy, as far as the interests of the workingmen and the interests of the whole country are con-