

education and development" of the worker. It is only human and natural for a foreman directly or indirectly to oppose promoting one of his workers if this promotion will seriously interfere with his production. I am always skeptical, therefore, of an employer who tells me he offers every incentive and opportunity for advancement in his organization unless he also tells me he has a well organized instruction department. Promotions are naturally facilitated by a definite system of training because an instructor can always train a worker to be ready to supplant the person who is to be promoted.

I cannot conceive of a body of workers having esprit de corps and morale unless they see that their successful efforts are rewarded by advancement. And this, please notice, applies to women as well as to men. Many people have applied scientific management methods as far as "the efficient use of men and materials" is concerned, but I have yet to be overwhelmed with many evidences of a broad and generous viewpoint concerning the efficient use of women in the matter of training and opportunity for advancement. A reservoir of pride and competence in workmanship has yet to be tapped when "equal opportunity" becomes more than a pretty phrase.

At the risk of being accused of singing in a monotone I must add that a clearly defined and above-board method of training and advancing workers is a most important factor in insuring a sound sense of justice in them. There has been only too much justification of an attitude of suspicion concerning advancement in most organizations. Where the scientific management point of view prevails, workers see evidences on all sides of policy and system taking the place of favoritism in this matter of promotions. This entails a careful working out of relative rates based on a classification of jobs. It also entails utmost publicity as to both the earning opportunity accompanying each job and the rating of individuals holding these jobs. In places where rates are accessible to all there is a complete elimination of rumors and underground currents of distorted facts which are rife where rates are surrounded by secrecy. It may be added that there is no comparison between the sense of fairness which prevails in a plant where the relative value of jobs is a matter of common knowledge and the place where people are refused such knowledge. During the past ten years there has been notable advance in our plant in the matter of classifying jobs on the basis of the skill and effort they require and their comparative

value to the organization, and in working out an equitable system of wage payments based on the relative rating of these jobs whether manual or clerical.

Let it be understood that in this matter of classification it is most important that management have a picture of the rungs of the ladder. To draw such a picture in order that it may be set clearly before the organization, the same process of analysis and study is involved as in other phases of scientific management.

Among the phrases which are frequently used with a lazy conception of their full significance is "participation in management." I wonder if the users of this phrase can suggest a better way of assuring such participation than by furthering means of rating jobs and the abilities of individuals to fill them, accompanied by opening the gates of opportunity to those who qualify for such participation. A works council and the privilege of voting do not by any means insure "participation in management," though they are valuable from an educational viewpoint. There must be a constant effort to discover people capable of promotion and the offering of opportunity to them in the way of filling executive positions from the ranks.

But training and advancement are not essential in the case of operatives only. Let us see what Taylor has to say concerning the training of foremen. In his "Principles" we read, in his keen analysis of the failure of a certain firm to install scientific management, "Unfortunately the men who had charge of this work did not take the time and the trouble required to train functional foremen, or teachers, who were fitted gradually to lead and educate the workmen. They attempted, through the old-style foreman, armed with his new weapon (accurate time study) to drive the workmen, against their wishes, and without much increase in pay, to work much harder instead of gradually teaching and leading them toward new methods." Here in a nutshell is the trouble with many plants. We hear much about foreman training which in a large number of plants consists of a series of lectures and discussions conducted by some foreman training agency. This is good, as far as it goes. But it does not go far enough. Nothing can relieve management of its duty in the training of its own foremen. What Taylor terms the "side by side" working of management with men is doubly essential when it comes to the clear, first-hand enunciation of policies and principles by management to foremen. When a manager gets to the point where he expects his foremen to

clarify and explain organization policies to workers without realizing his own responsibility in the enunciation of these policies he is taking too much for granted. Here, too, men who are astute enough to pierce the wisdom of Taylor's philosophy do not attempt to pass the buck and lighten the load of their own responsibility. The applied philosophy of scientific management makes managers work. Witness what Taylor says in this connection: "The writer is one of those who believe that more and more will the third party (the whole people) as it becomes acquainted with the true facts, insist that justice shall be done to all three parties. It will demand the largest efficiency from both employers and employes. It will no longer tolerate the type of employer who has his eye on dividends alone, who refuses to do his full share of the work and who merely cracks his whip over the heads of his workmen and attempts to drive them into harder work for low pay. No more will it tolerate tyranny on the part of labor which demands one increase after another in pay and shorter hours while at the same time it becomes less instead of more efficient." As for demanding effort of management in training leaders Taylor says in his introduction to "The Principles of Scientific Management": "In the past the prevailing idea has been well expressed in the saying that 'Captains of industry are born, not made'; and the theory has been that if one could get the right man, methods could be safely left to him. In the future it will be appreciated that our leaders must be trained right as well as born right and that no great man can (with the old system of personal management) hope to compete with a number of ordinary men who have been properly organized so as efficiently to co-operate."

As members of an increasingly exacting public we wish to be sure that the principle of training is carried out in both public and private enterprises which concern our pocketbooks. Those of us who are personnel workers should have an especially keen interest in training because it is one of the pillars of healthy industrial relations.

#### IV. Intimate Friendly Cooperation Between the Management and the Men

And now we come to the fourth and last principle as laid down by Taylor,—"intimate friendly cooperation between the management and the men." The term "enforced cooperation" is one of those unfortunately crude phrases which have been lifted out

of their context and quoted to Taylor's detriment. If his detractors had been fair they would have quoted such phrases as "gradually teaching and training," "friendly help," "management side by side with men" and "one man after another should be tactfully changed over." He much resented the fact that "those men who have the greatest influence with the working people, the labor leaders as well as many people with philanthropic feelings who are helping them,—are telling them that they are overworked," and yet in speaking of pig iron-handlers he said, "If this man is overtired by his work, then the task has been wrongly set and this is as far as possible from the object of scientific management." This was the straightforward, clear thinking, outspoken man who did not mince words when it came to the facing of responsibility by both management and men.

It goes without saying among us personnel workers that it is this kind of thinking and talking on the part of management which commands the respect of workers and automatically secures their cooperation. With Taylor, we may almost say that inasmuch as one cannot resist fair dealing, cooperation may be said to be enforced by it. But let no one think that Taylor believed cooperation to be such a tangible and concrete thing as to be capable of installation at will, like time study. On the contrary, he sorely deprecates what he terms "the wrong spirit" in some people who use the mechanisms of scientific management and urges that "complete revolution in the mental attitude" of managers and men. Cooperation, indeed, is the result of an honest application of the other fundamental principles of scientific management plus "the right spirit."

This "right spirit" is a difficult thing to define. Simply and concretely it has been clarified by Taylor himself when he said, "It is difficult for two people whose interests are the same and who work side by side all day long to keep up a quarrel." And so those of us who are fortunate enough to work in scientific management plants find it. Where management is alive to its responsibilities and considers its practise a profession, where "a fair day's work" is a matter of scientific investigation and not Sunday School sermonizing, where leadership is based not on might but on right which in turn is based on facts, there we find cooperation in flower. As Sheldon says, in such a plant "Management instead of being a law unto itself, has found that there are laws which it must itself obey."