

Also, in connection with the development of bonus work the conditions are similar. In the old-fashioned way of doing it where a man is working by the day or by the piece he simply loses his time when the machine is shut down. The management's attention seldom is called to the defect, they know nothing about it, and the man realizes that he must submit or lose his job. Now with more exact standards and bonuses, the slightest loss of bonus automatically is brought to the attention of the managing department. Consequently, you have an intimate co-operation. If a machine is down for repairs and a man loses his bonus through the fault of his machine, a kick is expected, a "damage report" comes through as a matter of routine and the machine must be fixed. And by making this trouble the men not only do themselves a good turn, but also are all the time doing the management a good turn by showing them that they must keep up to their job and handle their machinery and their methods in such a shape that the whole shop can be worked efficiently.

MR. HENRY REED MALLORY: I should like to ask a question. In a factory where there are a great many old machines, the inspector in going through and making a thorough inspection would probably have to dismantle a whole machine and go through it, in order to find out all the faults in it. Here is one point I should like to bring up. Is it necessary to tear down the whole machine and examine every part of it, and then find out that you probably have to buy a new machine, rather than to make all the new parts for it?

MR. H. K. HATHAWAY: I want to comment on what Mr. Thompson has said. I may have given you the impression that we who are interested in operating shops under scientific management are not keeping our machinery up so that the men can earn the bonus. I may perhaps have exaggerated that condition. We do keep them up after a fashion. What I am complaining of is that we really do not keep them up in a systematic way. Now, Mr. Thompson says, and very properly, that if we do not keep them up so that the men can earn the bonus, if the condition gets too hard for the men to accomplish their task they will kick and will compel us to keep up the machines. Very true. But why should we shoulder that onto the man? Why should we make conditions for him so difficult that he comes to us and forces us by his persistent complaints to do something that we ought to have done in the beginning, so that he never would have to complain about the condition of his machine? That is the point I want to make.

<sup>1</sup>Barcalo Mfg. Co., Buffalo, N. Y.

And that is what Mr. Taylor had in mind with the maintenance system as he developed it at Midvale in the early days: to prevent things getting in such a condition as to make it difficult for a man to earn his bonus. Of course one of the finest features about the bonus is that it does force the management to live up to its responsibilities.

Now, there is another point that I started to refer to, in connection with Mr. Schulz's discussion, and I got off the track. Mr. Schulz pointed out that we do take care of the small tools in a machine shop, and in a machine shop we do, I should say, take care of them as a rule very well, and we take care of the belts very well. Now, in plants that are not machine shops—and there are as many plants today under scientific management in other lines of industry as there are in the machine industry—in those shops the tendency is to neglect the small tools. In fact, the majority of them will tell you, if you ask them, in speaking of tool rooms or tool maintenance system, "We have no tools in our plant—we do not use them." And you go around and size up any workman, and you will find that the pockets in his overalls are just bristling with screw-drivers, wrenches, pieces of wood, and one thing and another, that he uses.

As to Mr. Mallory's point, the condition of the machinery as a whole at the time the operation involving the use of the machine is put on the bonus, when the time studies have been made, ought of course to be looked into. It is almost invariably necessary to completely over-haul whatever machinery you are going to bring under the task and bonus system. After that has been done once it ought not to be necessary to completely dismantle the machinery to inspect it. As I tried to point out in my paper, there are some parts of the machine which wear rapidly, which should be looked after at frequent intervals. There are other parts which do not call for inspection, perhaps, except at intervals of three or four months, and some parts perhaps once a year. If a machine is so old and in such a condition as to cost more to repair it than a new machine would cost, then of course the obvious thing to do is to put in a new machine.

Mr. McEnnery, of the Universal Winding Company, referred to the question of tasks. I had not in this matter looked so far ahead as to set tasks for maintenance work. I do not know whether it might be done or might not. There are some parts of it, no doubt, that could be handled on a task basis. But I should be perfectly well satisfied if we could only have it done systematically, and without waiting for the workman to come to us and say, "Here, I cannot make my bonus on this machine, and if you do not fix it up I am going to quit." That is

the point I make. The management should get over its responsibility.

As to the carrying of a stock of parts, whether that stock should be carried by the maintenance department or carried in regular stores, I think is a matter of inferior importance. If you have a store-keeper's department, I suppose that is where they should be carried; and if not, the maintenance department should carry some stock or stores.

MR. GUSTAV E. SCHULZ: There is one other point I should like you to bring out. When you do some these things—when you inspect and repair the machines—you get a much stronger machine, and the man working on it gets the benefit of that.

MR. HATHAWAY: Yes, in putting a machine on task and bonus, almost invariably after we have gone

over it and put it in first-class condition we have a better machine than we had before, because we have strengthened it.

MR. SCHULZ: And that is true of maintenance, too?

MR. HATHAWAY: You mean as to the company's break-downs?

MR. SCHULZ: Yes.

MR. HATHAWAY: Mr. Taylor used to say that if a machine broke down two or three times at the same point, that was nobody's fault, but if it broke down four or five times that was the fault of the man in charge of maintenance.

### THE TABOR BENEFICIAL SOCIETY<sup>1</sup>

BY HERMAN J. HUTKIN AND NATHANIEL JOHNSON<sup>2</sup>

People employed in a plant do not, as a general rule, get together in a proper spirit of mutual and helpful cooperation unless they have formed from among themselves an organization devoted to such a purpose. Such an organization should be managed exclusively by the employees themselves.

Working people as a rule look upon anything in the line of welfare work done for them by their employers as charity, and they usually look with disfavor upon anything which may savor of charity being done for them. They only enjoy fully such benefits as come from their own efforts.

There is such an organization at the plant of the Tabor Manufacturing Company in Philadelphia, Pa., and it is the intention of the writers to give a fairly complete account of the causes leading up to the formation of this organization, its purposes, and activities.

Before this organization was formed, if an employee was injured or became ill, unless he was one of those who had been able to set aside a sufficient amount of money to guard against such misfortune, he was inevitably set back financially, and as there was no scheme in effect to take care of any such cases, it was necessary to let him work out his own salvation so far as financial relief was concerned. If he was fortunate enough to have any friends who were popular throughout the plant, and they in turn were willing to do so, a scheme of some sort—such

<sup>1</sup>A paper presented at a meeting of the Taylor Society in Boston, Mass., Saturday afternoon, March 3, 1917.

<sup>2</sup>Tabor Manufacturing Co., Philadelphia, Pa.

as a raffle, collection, etc.—was usually gotten up whereby enough money was collected and turned over to the sick or injured man to help him out for a while. If any man who was not popular tried to do this sort of thing for an injured fellow-employee he almost invariably netted nothing but his trouble.

Men on one floor or in one department usually had nothing in common with men on another floor or in another department, and in some cases did not know, when meeting each other outside of the plant, whether they were fellow-employees or not.

As a result of some men getting help in times of illness and others none at all, several of the men got together in April, 1909 and formed an organization, under the name of the Tabor Yearly Beneficial Society for the purpose of getting the men to know each other, and for the purpose of providing for the relief of any employees who became ill or were injured and were unable to attend to their daily work, and also, in the case of a death, for the proper burial of the deceased. All employees of the Tabor Manufacturing Company were eligible to membership. The dues were ten cents a week, a sick benefit of five dollars a week was paid to any member ill or injured upon presentation of a properly filled out physician's certificate, and a death benefit of seventy-five dollars was given. Sick benefits were paid for a period of seven weeks, and no benefits were paid for a fractional part of a week. If there was not enough money in the treasury to pay benefits a pro rata assessment was made.

Where the illness was a prolonged one, exceeding