eye protection was established to prevent serious eye injuries, himself included.

The man was then informed that because his record did not show any previous citation for rule violations the disciplinary action report resulting from this case would show that he had merely been given a reprimand and warning without the loss of any time. The warning indicated that he had been informed that any subsequent violations of the rules might result in increased corrective action on a progressive scale.

Here again, the case was dispositioned with only enough "constructive discipline" to arrive at the desired correction of the employee's attitude and performance.

This program of scaled action to fit the case is carried out through the whole range of cases which might occur. Each succeeding time that it is necessary to apply disciplinary action to an individual employee, his previous record *is* taken into consideration. In those cases where it is clearly evident that the previous actions have not resulted in the expected improvement in the employee's attitude and behavior, additional motivation is applied, each step being progressively more severe.

In a few very serious cases, the end result may finally be a discharge. I am glad to be able to say that very few cases go to this extreme. The lack of extreme cases indicates that the system of progressive actions takes hold and does the job somewhere along the line before the final stage is reached.

Since a disciplinary penalty is imposed *solely* to obtain improvement of future behavior, follow-up is important in determining whether it has been effective, or whether further action is necessary.

Up to the present time we have dwelt extensively on the techniques utilized in the "constructive use of discipline in safety violations." Now, let's give a little consideration to the end results of such actions. This is the meat on the menu. This is the payoff. While we do not, by any means, give our company program of "constructive discipline" the *whole* credit, we are sure that it played a very important part of the recent accomplishment of the Cleveland foundry of the Ford Motor Co. in establishing a new all-time National Gray Iron Foundry Best Record of 3,421,133 man-hours of exposure without a disabling injury.

We also are sure that this technique of using discipline for *corrective* purposes played an important part in the record of our two Cleveland engine plants. These two plants have, within the span of less than ten years, posted periods of over 3,000,000 man-hours of exposure without disabling injury on *seven* separate occasions.

The use of "constructive discipline" can never be the answer to all problems. It can, however, help in the efforts to create a *safety awareness* in our employees which we all are striving for. Safety awareness? Now there is a term I like! Turn that over on the tongue of your mind for a minute! Get the taste of it? Let me give you an example.

Recently, while I was walking through an aisle in our foundry at Cleveland, an hourly man walking in the same direction but some distance ahead, noticed a small length of pipe lying in the aisle where it had apparently fallen from a passing scrap truck. The man, with scarcely a pause, stooped down, picked up the pipe and tossed it into another scrap truck and continued on his way. It was done in such a casual manner it appeared to be an act of habit.

That is what we want! We want safety so *ingrained* in our employees that they exhibit similar thoughtfulness in all their actions. Thoughtfulness that is a *habit!* And there is no contradiction of terms in *this* instance.

Here was living proof of the "safety awareness" we are striving for. Here was evidence of one of the factors which helped the foundry set a new record, helped the foundry exceed the old record, which had stood for five years, by a margin of well over 500,000 hours. Here was evidence that, properly motivated, employees *can* be moved to consider the "other fellow's" welfare as well as their own.

This man's action may well have prevented the next man coming along from taking a bad spill. Such patterns of thought can cause a man who, in the past, had been guilty of leaving a guard off a machine, to now pause to replace it upon completion of his job. Development of such *safe* work habits can truly make a man become, almost unconsciously, his "brother's keeper."

We do not know whether this man had ever had occasion to have "constructive discipline" applied to him. We have no way of determining since the man was not identified. We like to think, however, that this is the sort of attitude which can be developed by the technique of applying discipline in a corrective sense, rather than in a punitive sense.

You all know what happens when you push a pendulum. You give it a push and it swings right back at you. If you give a man a push he also has the same reaction: he has a tendency to take a swing at you in return, in one way or another. It is our thinking at Ford that much more can be accomplished by *leading* a man onto the right road by correcting his errors in a constructive manner. This leading, nevertheless, must be firm to avoid being misunderstood as weakness.

Someone says, "Nuts! There are some guys you can't reach with anything but a big club and a size 14 boot." There may be some truth in this statement, but, (and that is a *big* but) these cases are few and far between and we should not fall into the trap of accepting this as a dump for all of our problem children. It costs money, a *lot* of money, to train employees to perform today's complex jobs. It costs money, a *lot* of money, to have our employees suffer industrial injuries.

It is our job to save our employers from the unnecessary expense of discharging errant employees. It is *also* our job to save our employers from the unnecessary expense of accidental injury. It is even more our job to discharge our moral responsibility of preventing the human misery to the employee and his family which invariably results when the bread-winner is laid low because he or his fellow-employee failed to heed the safety rules.

In nearing the conclusion of this discussion, let us remember that the old days of the woodshed as a symbol of discipline are gone and past. More enlightened thinking and the teaching of experience has opened a better door. A wider portal with broader vistas: "constructive discipline," based on correction, not punishment.

It is a prime tenet of psychology that the human animal has a greater tendency to remember pleasure than pain. How many of you can remember the occasions on which your Ma or Pa beat the bejabbers out of your little hind-end? I'll bet not one of you can, or, at most very faintly. On the other hand, I'll also wager that many of you can still clearly remember the old swimming hole, how much fun you used to have at the County Fair or many other pleasures of your childhood.

Not that we mean to imply that applying even "constructive discipline" to our employees will be a pleasure to them. Rather, we should attempt to remove as much of the pain as possible from our corrective action to lessen the tendency to forget unpleasant experiences. *Educate, teach, correct*, that's the ticket. Punishment for punishment's sake belongs to the Dark Ages.

SAFE APPLICATION OF ELECTRIC CONTROLS ON MACHINE TOOLS

By F. C. PEREGOY
Supervisor of Safety, Westinghouse Electric Corp., Baltimore, Md.

By definition, machine tools include all power-driven equipment performing cold-working of metal by progressively removing metal in the form of chips. The National Association of Machine Tool Builders has classified some 200 types of machine tools under five basic functions—turning, boring, milling, planing and grinding.

Authorities agree that injuries from machine operation are likely to be more severe than injuries from other causes; and more likely-to result in permanent disability. For example, Accident Facts shows machinery to be the source of 10 per cent of all injuries, but the source of 19 per cent of permanent disabilities.