mittee, your statements will be given extra weight and credit. So it is a duty you owe to the committee, to yourself, to other members of the committee, to procure and report accurately and completely the facts. "4. So far as consistent with other duties,

"4. So far as consistent with other duties, investigate cases of injury and damage to property to determine what may be done to avoid a recurrence from similar causes.

"5. Before making any recommendation which has originated with you or been suggested to you, think the matter over carefully. Determine first, whether your recommendation, if adopted, will make conditions safer, and secondly, whether its adoption is reasonable and practicable.

"6. If you see employes violating rules or instructions or taking unnecessary chances in their work, it is your right and

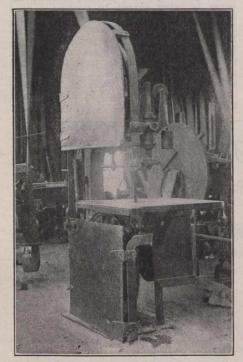


Fig. 5.-Band Saw Protection.

duty to warn them of the serious consequences which may follow such practices, to explain to them, if necessary, the proper and safe way, and to urge them to comply with rules and instructions and do their work in the safest way. To discharge this duty effectively requires tact and diplomacy, which, if you do not already possess, you can and should acquire by cultivation for your own personal benefit as well as for the advancement of the cause of safety.

"If you, in fact, feel a real unselfish interest in the safety of your fellow employes, you can, by the exercise of patience and good judgment, call attention to their shortcomings and secure their correction, and at the same time make friends for yourself and the cause of safety. You can do a great deal of good by a conscientious and proper performance of your duty in this respect."

The above clearly outlines the duties of the members comprising the committees. Each one, in his particular occupation, is to be ever on the alert for improved conditions of safety. To make the reports more thorough, the mechanics from the major portion of the local committees, for the reason that they are, in the course of their regular work, more in touch with the details of the conditions as they exist, whereas the higher men, at the best, can do no more than know the bigger problems, the smaller things being left to these juniors.

Each of these committees meets at the discretion of the chairman, and on these occasions the note books are called into service, the observations of the different members being discussed thoroughly on all sides, and definite action taken thereon. The smaller and purely local matters are acted upon at these meetings, but the larger questions that would concern other divisions of the system are referred by either of the local committees making the observation, to the central committee, which in turn, if the matter is of sufficient importance to warrant it, refers it to the general safety committee for final action. Thus the smaller things are settled locally, and the more important questions passed along for the benefit of others. These reports from the local committees are made not later than the tenth of the month following that in which the meeting was held.

Throughout this article, there are illustrations of the manner in which the shop committee at St. Thomas, Ont., has improved its opportunities by the protection of machinery. All these improvements have been made within the last few months, as it was only in June that the safety organization movement took definite form, the first meetings of the local committees at St. Thomas being held in July. The locomotive and car departments have set up a healthy rivalry in the matter of protecting machinery, resulting in a very good showing in the short time it has been used.

Fig. 1 shows a simple gear guard on the rear of a slotter in the locomotive department, made of sheet metal and smokebox netting. In the same department is a typical gear protection on a punch press as in fig. 2. Fig. 3 is a sheet metal rip saw feeder star protection in the car department. Fig. 4 is a planer gear protecting railing around the pit containing the operating gearing; it is made completely from piping. Figs 5 and 6 are of wood machinery in the car department. The band saw is completely enclosed with swing doors. The construction prevents all possibility of the saw flying out and injuring the operator or bystander, and has that added advantage that the chilling breeze set up around the operator's feet by the rapidly moving saw is removed, a comfort in winter. The wood drill case is also simply made of sheet metal, with a hinged front door for oiling and examination of the

N. Y. C. & H. R. R. R. "Every employe should report promptly to his foreman or other proper person every unsafe condition."

Fig. 7.-Typical Warning Placard.

working parts. The drill spindle to the left is also protected by having a collar shrunk on over the setscrew, making the head of the latter flush with the surface, and not dangerous to the loose ends of the operator's clothes. In conjunction with this campaign for

person every unsafe condition." The other cards are as follows:—"The more you insist upon carefulness on the part of others as well as exercising it yourself, the safer it will be for all." "The practice of getting on and off moving cars and engines results in injury and death to many employes. Those whose duties require such practice should exercise all possible care. Other employes must not jump on or off moving cars or engines." "Safety should be the first consideration of all employes. In all cases of doubt take the safe course." "Let every employe of the New York Central begin the new year with a firm resolution to do everything in his power to avoid injury to himself or others. This resolution, made and kept, will mean greater safety to employes for 1912." This latter

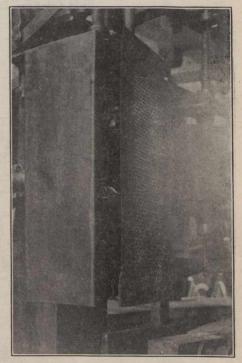


Fig. 6.-Wood Drill Protection.

card was posted in some shops of the New York Central Lines where the "safety first" movement was introduced earlier.

Other typewritten notices are posted on the shop notice board for that end of the safety propaganda. The first one is the following, and is taken from Mr. Bradshaw's book:—

"MEMORY GEMS FOR SHOP MEN.

"Don't wear loose, baggy, clothing where it is liable to be caught in machinery.

"Avoid walking on railroad tracks, and before crossing any track, 'Stop, look, and listen.'

"Be sure you replace all guards when through repairing machinery. Think about the other fellow.

"It is your duty, as well as your protection, to report unsafe condition to your foreman or superintendent.

"Stop machine before oiling, wiping or repairing it, and don't try to operate a machine you do not understand.

"Don't swing sledge or hammer that you know is working loose on handle, thinking it won't come off till 'next time.' You may not be hurt, but what about the 'other fellow.'

"Don't expect your helper to be as good a mechanic as you are. He isn't or he wouldn't be a helper. A little explanation as to the way the work is to be done may save injury to one or both of you.

"If you know of some machine not properly guarded, don't wait till some one gets hurt and say, 'I told you so.' Tell the