

ment employees maintain and inspect daily on the repair tracks and in the yards. It is here that personal responsibility of the car department employee is demonstrated, and a full appreciation of that responsibility is shown, for underlying the duty of the department in the inspection of equipment is the keynote of safety. First and foremost in a review of the activities of inspection and maintenance of equipment, there properly comes to mind the elaborate system of safety appliances, such as hand-holds, ladder rounds, coupler releases, etc., as established by regulation on all cars for passengers or freight. The primary purpose is to reduce accidents to train and yard men. The condition of the brakes on the cars, including air operating features as well as the physical parts such as rods, levers, pins, beams, shoes, etc., is another of the car department's responsibilities in accident prevention. Every one of these parts is subject to constant wear and possible breakage. They must be watched with extreme care to know that at all times they are in safe and suitable condition for further service. Running gears, couplers, draft gears, etc., are parts with which many railroad employees are not familiar and their "diseases" are not known. To the carman they are vital parts of the safe operation of the train as well as in the prevention of accidents. Experience has taught him where to look for failures, what weaknesses to check, what wear to allow and what limits beyond which he must not "take a chance" under any circumstances.

Freight House Accidents—Their Cause and Remedy

By L. B. HINE

Agent, Erie Railway, Binghamton, New York

The speaker said in part: Freight house accidents do not happen—they are caused. It is the agent's responsibility to eliminate them. This can be accomplished only through untiring effort, investigation and developing the cause of every accident, and the application of a remedy or cure that will prevent a repetition.

There are many routines and manners to be followed by a successful agent, in his promotion of the safety movement, and it is needless to say that this goes hand in hand with efficiency.

One, know your men. Two, issue a daily bulletin, quoting a safety rule, and require each member of your force to know that rule. Three, adopt a suitable safety slogan and change it with regularity. Four, be fair with your men, create in their minds without a shadow of doubt that you are interested in their personal welfare; develop their confidence—get them to realize the requirements of the rules and necessity for compliance with them to protect themselves and their families.

Realize that the education of some men at the larger stations or piers is quite a task owing to the general class of men employed. You must not forget, however, they are human beings. It can be done.

Have the rules and slogans issued in languages in accordance with the nationalities of your forces.

Have the general foreman and the foremen give a short safety talk to their forces each day before starting work. Conduct a weekly safety meeting, at which the agent must preside.

Place bulletin boards at various positions in your freight house, indicating the number of days your forces have worked without a personal injury.

One of our large railroads has had what is known as the star system. A chart is placed in a conspicuous position, in which a space is shown for each day of each

month, covering the current year. The foreman places on this chart before the forces go to work each day a gold star if no accident has occurred the previous day. A blue star for a minor accident and a red star for a lost-time accident, also are used. It doesn't take long to create enthusiasm by such an arrangement. It is by the creating of personal interest that results are accomplished.

A contented man is an asset; and when the average man knows that his superior is interested in him, he is contented. When he is in that state of mind you can easily convert him into a safe man.

Report of Committee on Train Accidents

By G. H. WARFEL

Assistant to Executive Vice President, Union Pacific System, Omaha, Neb.

The speaker said in part: The subject of train accidents is one which oftentimes does not get the attention it deserves, particularly from railroad safety men, because only a comparatively small proportion of the casualties (and the casualty rate per million man-hours is the criterion upon which the safety men judge their work on railroads) result from train accidents, and men are apt to overlook their importance.

Of the 1,265 collisions occurring in 1932, 114 were head-on or rear-end collisions between trains. There were also 112 side or raking collisions and 10 at crossings with other railroads, leaving something over 1,000 occurring on yard switches and in similar operations.

More significant from a safety standpoint is the fact that more than 90 per cent of all collisions are directly ascribed to negligence of employees. In the analysis of these negligent cases, the principal items are: the disregard of fixed signals; the disregarding or misunderstanding of hand signals; failure to secure hand brakes; leaving switches set wrong; failure to comply with speed restrictions; improper handling of locomotives; and failure to keep proper lookout. We find, therefore, as we go through other classes of train accidents besides collisions, that that same old factor, which in the annual statistical bulletin is described as negligence of employees, insists on showing up.

Train accidents are important in another way, too. A railroad may have a very fine employee casualty rate; it may even have won an award because of its employee casualty rate on the basis of safety work among employees. It may have a good safety record all the way around. But one train accident of serious nature may largely undo in the public mind all the advantage of those long years of patient work in building up a reputation for safety.

So we get back to the same thing in train accidents that we have in the train service and in every other type of accident on a railroad. The all-important thing in any safety campaign on any railroad is the proper education and training of employees.

The first thing necessary for a trainer is that he know the thing he is training the men for. If he does not know it from his own experience he must study it very carefully, because the teacher cannot teach the student if the student knows more about the game than the teacher himself.

We have a situation on the American railroads today somewhat analogous to that in surgery a generation ago. Thirty-five or 40 years ago American surgeons knew almost as much about anatomy as they know now. The doctor knew where to cut and how to cut; he knew how to stitch; but of the number of cases that