

TUESDAY AFTERNOON SESSION

October 3, 1933

Address

By **FREDERICK E. WILLIAMSON**

President, New York Central Lines, New York City

The speaker said in part: I got my first lesson in safety in a very trying way. I was working in Utica, and the yard was badly congested. I was working with a switch engine in the lower part of the yard, and it was snowing hard. I was on top of a string of cars, and I was trying to figure out how to get them out. I swung down on a side ladder, with my mind wholly intent on what I was trying to accomplish, and stepped back on track No. 2—there was a screech of a whistle, and here suddenly was No. 3's engine about 50 feet away, or so it seemed to me. Instinctively, I made a dive between this string of cars that was pulling out, and I could just feel that pilot beam whistle by me, and the engineer thought he had hit me. He stopped and came back to find that I was all right, but certainly I got a safety lesson from him in no uncertain words.

So I learned my first safety lesson by a shock and a scare. Today, however, we have adopted another principle. Now we are trying to teach the young men safety by rules, by education, rather than by letting them learn through experience and narrow escapes that safety is essential.

You and the affiliated safety bureaus of the several railroads have taught us to understand that while you can't undo accidents that have happened, you can see to it that no accident that does happen will be considered a closed book until there is a thorough analysis of its cause, with a view to the avoidance, wherever possible, of that same cause of succeeding accidents.

As we review the official records of the Interstate Commerce Commission, we note with pride the progress of the American railroad in the reduction of accidents, and all who are familiar with the subject recognize the large contribution of the Safety Section of the Association in that noteworthy achievement.

One of my distinguished predecessors in the presidency of the New York Central Lines was fond of saying that a railroad is composed of plant and personnel, and that personnel represents 90 per cent of its value. Much of the success of your work is dependent upon a recognition of the large importance in safe railroading of the so-called "human element." You must consider and deal with a mental approach of officers and employees to all safety work. It is not enough that the physical plants be cleared of lurking hazards, nor is it enough that instructions as to the safe methods of operation be promulgated. Both of these things, of course, are vital. Of equal importance, perhaps of larger importance, is the molding of mental attitude toward safety movements, and toward safety itself. The number of accidents that are utterly unavoidable is surprisingly small. Everything that is done to impress on all the frightful cost of accidents in life, limb and money, is yeoman service. We must eternally seek to instill in the minds of all a serious respect for safety measures and a dogged determination to do, each one, his job, not only well, but safely. Your section is now, as it has been from its inception, in the vanguard of that movement, and it is but candid that I say to you that railroad executives generally, congratulate and hurray you for what you have done and are doing.

The Art of Teaching Safety

By **C. B. BOULET**

Safety Director, Wisconsin Public Service Corp., Milwaukee, Wis.

The speaker said in part: Safety engineers and executives have learned that before you can stop accidents, the accidents must be analyzed individually and collectively, and proper remedies applied; and the only way to apply the remedies is through teaching the facts that the accidents disclosed must be taught. That cannot be done in a week or a month. It is a continuous job, year in and year out.

It is a generally accepted fact that teaching is made easier and more successful if the individual we desire to teach is in a receptive frame of mind. How are you going to do this? By appealing to the things that the man most desires to have. Put yourself in the position of the man who is working for you, and let's see what the things are that are wanted. Suppose he is a machine operator, a switchman, or whatever his job is—there are certain things he wants. First, if he is any kind of a man, he wants to keep his job. That is the first thing. Second, he wants to keep his pay. He doesn't want a job unless he gets paid. Third, he wants to be able to do his work in a satisfactory manner, not only satisfactory to himself but to his employer. Fourth, he is interested in his family, in his family's protection and in his family's welfare. Fifth, he is interested in his own pleasures, playing the violin, moving pictures, playing golf, etc. Sixth, if he is the right kind of an employee, and if you have taught him right, he is interested in the company's success, because in that he will find his own success.

We as safety engineers must absolutely first convince the man that an accident to him, no matter how minor, is a real loss to himself and to society. After that, I think you can show him first of all that your company is interested in safety, and you can prove it to him by saying, "Do you know that safety construction is in everything we have? Notice the guards on the machines, the type of operation we are carrying on, the type of equipment we are using. Safe construction and safe conditions are part of the management."

I used to be a teacher and there are a few things I believe I can pass on that will be helpful. First, the presentation of the subject that you want to teach. The presentation must first of all be simple. It must be brief. It must be absolutely to the point.

Second, the arrangement of the material that you teach must be logical. There must be a logical sequence to the things that you are trying to teach.

Third, the facts that you are trying to teach must be, wherever they can, related to the facts the man already knows, in order that by association with existing knowledge he can retain those facts.

Last, your word picture must be clear.

How can we accomplish these things we are going to try to present? Let us go back to the school situation. How did your teacher teach you arithmetic and spelling? First of all, by repetition. You remember how you learned the multiplication table. How were you taught spelling? Again, by repetition. You would spell the word orally, and if you missed it you would write it a hundred times.

Are you using that trick in teaching safety, or are you just telling the men once and forgetting it? That is one of the first principles of teaching safety, repetition. In connection with repetition, it is very important that repetition be made not over only one day, but over a long period of time. Experiments have proved that the