

Letters to the Editor

[RAILWAY SIGNALING welcomes letters from its readers and especially those containing constructive suggestions for improvements in the railway field. Short letters—about 250 words—are particularly appreciated. The editors do not hold themselves responsible for facts or opinions expressed.]

Personal Railroading

TO THE EDITOR:

Why is it that technical magazines do not give more space to railroad personnel? It seems to me that it is just as important to know what kind of a signal engineer or signal maintainers they have on the XYZ railroad as it is to know whether they use W & Y light signals. Probably, it is because mothers do not advertise their boys like the signal companies do their products.

Who is a good signalman, anyway? I asked the boss and he says "there isn't any." The A. R. A. has failed, as yet, to prepare a specification for one. I used to think I was pretty good myself, but I have met so many that admitted they were better and never one that claimed to be any worse, so "I ha' me doubts." I used to think I knew one when I saw him, but since attending a recent meeting of railroad men I have more doubts.

At this meeting there were several railroad men of high standing and with a good reputation among their fellows as being the "goods." The talk finally drifted to a certain instrument which I said was badly needed on our railroad. One of the men said, "Why don't you buy it?" I replied, "The management won't." He answered, "Buy it anyway." I asked, "How can I—they cost over a hundred dollars and that takes an A. F. E." "You have a lot to learn about railroading," was his answer. "We recently needed one of these instruments on our railroad. I just made out a requisition for one and sent it in and along came the instrument. If they had held it up, I would have said I thought they cost less than \$100. We got the instrument and have done a lot of good with it and saved the company a lot more than it cost."

Is this good railroading? Not from a moral or religious standpoint, as that is too deep for signalmen who cannot agree as to how long a cotter pin should be or how it should be bent. Theologians argued for two hundred years as to how many angels could stand on the point of a needle and Methodists and Presbyterians cannot agree yet if dancing is immoral. The old time signalman knew that dancing was good railroading provided he did not forget to tell the dispatcher where the dance was held so he could be located in case of a signal failure.

One cotter pin does not make an interlocking plant, so back to the subject. Another man at this meeting said, "That reminds me—we recently needed another man in our department and doubted that the red tape could be unwound to get the authority for an additional man. I hired a man and after a couple of months the superintendent's office asked for the authority for this man on the pay roll. I merely filed it away until several more urgent letters came, then advised him that it was an old authority and we were just short a man. The office came back for the date of this authority and I had my clerk dig up the authority for the last man off this position. It was several years old and there had been

several changes in force since. Their records must have been 'balled up' so that they could not figure out just how many men of this position I was allowed, for I never heard any more from them and I have the man and am making good use of him."

Now the man that told the above is a good church member, strictly honest (I would trust him with \$1,000, without a scratch on paper), has a high standing as a railroad man and delivers the service, but some might question if this was good railroading. A cotter pin has two legs, so to be fair we must bend both of them. The men referred to above were spending the company's money, which on many railroads is not considered good practice.

The PXD railroad recently required some a. c. track relays for an A. F. E. The railroad had a stock of old relays, which were of an old type, wasteful in current and unsafe in operation. The road was very short of good modern relays and the management would not buy any for replacement. The man handling this A. F. E. ordered the old type relays, which cost about one-fourth less. He has a reputation for doing work at less first cost.

So when I ask you, "What is a good signalman," don't say to me, "I am!"

A. F. E.

Glass Standardization for Railway Signaling

THE Engineering Foundation recently issued a research narrative entitled "American Glass for Safety," incorporating some interesting facts regarding the development of colored glass for railway signaling as based on information supplied by Eugene C. Sullivan, vice-president of the Corning Glass Works, Corning, N. Y. An abstract of the paper follows:

Time was when each railroad had its own signal colors; greens ranging from blue-green to yellow-chrome-green, yellows from reddish yellow to green-yellow, not far removed from some of the yellow greens. About 1900, there were 32 different shades of green used on American railway systems. At least one glass manufacturer carried a dozen or more sizes and styles of lenses in each of these 32 shades. The situation was similar for other colors. To correct this dangerous confusion, the glass-making chemist called to his assistance the physicist and the physiological psychologist. After years of collaboration, there resulted for each color a universally adopted hue which affords maximum light transmission and maximum distinctiveness. The standard green, for instance, gives more light than other greens, and is less likely to be mistaken for yellow or blue.

An American glass-maker discovered that selenium could be made to produce a clear red of almost any depth, with the great advantage for railway signals that it transmits practically all the red rays, and, except some yellow, nothing else. Other red glasses transmit other parts of the spectrum in addition to red. Selenium ruby is used universally by American railways for danger signals, and tons of the comparatively rare element are thus consumed annually.

With the standardization of the green and red in hues which would not be mistaken for yellow, it was possible to develop a yellow signal and the introduction of yellow eliminates white or clear as a proceed signal. A white light means broken glass and indicates STOP. By re-designing the semaphore lens and employing the high transmission colors, the intensity of the color signal has been greatly increased.