signals on one road, as compared with similar operations on an opposing road, can readily be made record by an automatic graphic recorder.

With some 360 of these automatic interlockings now in service in the United States and Canada, it would seem that the time has arrived when the railroads should take concerted action in laying the facts before the state commissions and likewise, that these commissioners should lend a co-operative ear to the plea of the railways to lift these drastic speed restrictions at automatic interlockings. Efforts in some states have already effected some results. For example, it is understood that the Railroad Commission of California has raised the speed limit to 30 m.p.h. at automatic plants which are equipped with operative distant signals, and under similar circumstances, the Iowa Railroad Commission permits 25 m.p.h. However, at many interlockings a speed limit as low as 25 to 30 m.p.h. is an unnecessary handicap.

Letters to the Editor

Bad Collisions on Best Railroads

Γo the Editor:

What purpose is aimed at by the government in its investigation of railroad accidents? The improvement of the service, of course, so that the accident record with its account of deaths and injuries shall be reduced. But in reading the record in your December issue, page 640, of a rear collision, September 27, 1935, on one of the busiest railroads in the country—four-track, 100 trains a day, with freights nearly a mile long moving at 40 or 50 m.p.h.—I find rising in my mind a number of unanswered questions. Assuming that you have given a fair abstract of the Bureau's narrative and decisions. one must conclude that if government investigations are to be of benefit to the public they ought to be much more thorough than they are. You may recall that some years ago when the New York, New Haven & Hartford had several bad collisions within a few months, one of the members of the Commission went to New Haven and held public hearings; and the Commission's reports and comments at that time were quite severe; perhaps unfairly severe in some respects. That commissioner very likely did not know much about train operation, as compared with the inspectors who do the investigating now, but he was a sharp lawyer and knew how to slam the railroads.

The first thing to be noted in the conclusions of the report on this September collision is that the failure of the flagman to go back is made fully as prominent as the failure of the engineman. This conclusion is no doubt of the same tenor as that of the superintendent who has to discipline that flagman and that conductor; but it is unsatisfactory, because it does not get us anywhere. Everybody has known for 40 years that, with suitable and efficient block signals, the holding of flagmen to this duty of going back is an exceedingly difficult task. With a red light, much more powerful than any flagman's lantern, shining brightly from the signal bridge and into the engineman's face, how do you expect the average brakeman to maintain and carry out his resolution to go back a half mile? And it is the average brakeman that you have to deal with, not the especially efficient one.

And on a four-track road the dependence on the flagman involves very defective reasoning, for cases arise every day in which the flagman cannot tell which track an approaching train is traveling on; and as many other cases where the engineman cannot tell whether the red light swung across the track a mile ahead is for him or for a train on the other track. In case of doubt, you will say, take the safe side; but ask any wide-awake superintendent what degree of faithfulness he expects in securing obedience to that rule concerning doubts.

The engineman had been on duty 14 hours, and quite likely fell asleep. (The other collision reported by you in December was due to the neglect of an engineman who acknowledged that he had fallen asleep.) The fireman had been drowsy and owned up to it. It is very natural to ask why the road allowed men to work so long. It was doubtless to make it easy for the men to get home in the most convenient way. But is that a good reason?

Some railroad officers seem to think that the 16-hour limit in the hours-of-service law makes a 16-hour work day a reasonable one; but it does not. Sixteen hours is only a compromise to get a law on the statute books. That length of time may be right for an extreme limit, but the reasonable rule would be to set 10 or 12 hours (or less) as the normal day, to be lengthened only in emergencies. The railroads ought to do this without waiting for the government to act. Possibly no one but a Mussolini, with machine guns, could establish this reasonable practice; but it is reasonable all the same.

What was the sleepy engineman doing in the 30 hours that he was off duty prior to this run? This is not the most vital issue in this inquiry, but it is a very natural question. The Bureau seems usually to treat it as secondary. Culpable men and weak witnesses will sometimes make deceptive statements, but that is a difficulty common to nearly all investigations. Collisions on very busy railroads call for thorough inquiry, such as lawyers give to murder cases.

The public each day is giving increased attention to railroad matters and we may some day have the Interstate Commerce Commission taking a hand in the subject of discipline. It behooves the railroads to put their houses in order without its assistance.

The "public"—that is, non-railroaders—will call for automatic train control if the subject should become sufficiently prominent. What could the railroads say to that? Sentiment is, no doubt, very much divided; and, with financial problems pressing as a heavy load on every president's shoulders today, the most universal prayer, no doubt, is that the good Lord will see that the collision problem is kept in the background for a few years. The highest form of protection from collision today is the cab signal, as used extensively by the Pennsylvania; but we have to remember that this "state of the art" was reached only by the enormously expensive ten-year course of education through which the government led us; and any new step today would probably arouse fears that new and unheard-of ways of unwisdom might be concealed in the clouds of uncertainty arising in everybody's The government, through the Interstate Commerce Commission, continues mildly to urge "consideration" of automatic train control or cab signals—evidently desiring to avoid any definite commitment; but this attitude probably has very little significance at present. As long as the British government is in a denser fog than our own, things are likely to continue to drift aimlessly. Possibly poverty may compel inaction.

But it remains true that simple, old-fashioned discipline, with education, has never yet been tested to its utmost in the train service. It is conceivable that millions of dollars spent there might do good comparable to that done by millions spent on machinery.

V. P. O., New York