portance whatever when a crossing signal indicates "proceed"? Why not put it down on the mast where it cannot be overlooked when it is most needed? Why feel elated over the fact that the National Conference has "established the principle that the flashing red light means 'stop' and then proceed when safe," when this same Conference is immediately forced to adopt the "Stop on Red Signal" sign required in an effort to make the same flashing red light understandable? Is there anything permissive in the meaning of such a sign?

These are some of the questions which may be asked as those beginners in the highway crossing problem gradually acquire some of the fundamental knowledge. It seems to me some of them may prove somewhat embarrassing.

With all of these things to consider, and bearing in mind that no duplicate sources of power or standby equipment has ever had to be provided for the protection against failure of the "closed-circuit principle" or the force of gravity, I wonder if the members of the Signal Section can, with a satisfied feeling of security, "urge the officers of their railroads to insist on the adoption of A.A.R. standard signals when dealing with public authorities." Would it not be better to make available, signals about which so many questions cannot be raised, and use the energy thus relieved in an effort to convince public authorities that the highway crossing condition is not a result of increased railway traffic, but is due entirely to highway traffic, and that the responsibilities resulting therefrom are not entirely railway obligations? H. E. Brashares,

H. E. Brasnares,

Assistant Superintendent of Signals, Great Northern.

Improving Crossing Protection

To the Editor:

Has the pendulum swung too far in the omission of the audible part (bells) of highway grade crossing signals? I feel it has. The bell has a definite value to pedestrians and to vehicles starting up from the side of a highway, street or driveway, out of range of the visual signal (red lights). A bell is a very effective close-up warning. About the only objection to the bell is the possible annoyance to nearby residents. A judicious use of so-called pedestrian bells for such places should readily solve that problem. I know one large trunk line which has a bell on every crossing signal.

It is usually very difficult to obtain permission to eliminate grade crossings of secondary streets in cities and villages. I wonder if a determined and general effort is made to close such crossings to vehicles but continue them as foot-walk crossings! Probably many neighborhood residents object to walking around a block or two but would not object to driving such extra distances. In cases of rather heavy pedestrian traffic, a relatively inexpensive, old fashioned crossing bell with short ringing sections would be sufficient protection for such sidewalk crossings.

Probably no relatively inexpensive device has proved so easily adaptable and effective as reflector buttons for marking highway and railway signs. Their use will undoubtedly be greatly extended. Unfortunately, the railroads have not directed the application of this highly effective device to highway-railroad grade-crossing marking and protection as they should have. Already other interests, Federal and State Highway and State Railroad Commissions, have established practices which may not logically fit into a comprehensive properly-correlated and uniform application for the entire country. The A.A.R. should take further action to co-operate with Federal, State and other public bodies to establish such a uniform practice for reflector-button signs, etc., for railroad-highway grade crossings.

Another mystery to me is why railroads do not have high-grade telephone circuits the length and breadth of their property for handling more important routine business now done by telegraph. Telephone train dispatching has proved so satisfactory that there is no question of the practicability of maintaining high-grade telephone circuits on railroad pole lines. The installation expense would be relatively small considering the advantages to be derived. Additional maintenance would be practically nothing.

Iconoclast.

Use of Cab Signals

To the Editor:

That report on the fatal collision at Lagny, France, in 1933, killing 200 people, printed in *Railway Signaling* for March, page 170, has a bit of a lesson for us in America, it seems to me. As this lesson is not explicitly stated in your report, it will be worth while to recur to the subject for a moment.

The Railway Gazette speaks of the rule requiring an engineman to surely see every roadside signal, regardless of any information that he may receive from the apparatus in the cab, treating the latter simply as an adjunct; but points out that a rule like this is not good for much except as a legal technicality: for "the fact remains that in the cab we have to do with human beings" and the temptation to a man who has missed a roadside signal to rely on the cab signal is a very strong one.

What experience have American enginemen had with this "temptation"? Cab indications have now been in service on hundreds of engines on numerous large roads in this country for several years, and have been in service on one road for *over twenty years*; and hundreds of engine runners today must have in their minds very definite conclusions, formulated or unformulated, as to the best and safest practice.

Under the latest theories of government in the United States, the questionnaire is a popular instrument for gathering information throughout a wide field. Why not try it here? A thorough-going review of modern enginemen's minds ought to improve our thinking on this general question; the question of whether cab signals should still be considered as an adjunct, or should be treated as the main thing.

It would perhaps require some little skill and finesse to get from enginemen their real inmost feelings or their actual everyday practices, as distinguished from their "views for publication"; but the thing could be done.

Your older readers will recall that automatic block signals were used on American railroads for several years as "adjuncts" while the time-table, with its sometimes slightly confusing rules, continued to hold its position as the main thing. The change came very slowly. But there is no need of being as slow in the twentieth century as we were in the nineteenth.