What's the Answer?

An open forum for the discussion of maintenance and construction problems encountered in the signaling field. *Railway Signaling* solicits the co-operation of its readers both in submitting and answering any questions of interest.

TO BE ANSWERED IN A SUBSEQUENT ISSUE

(1) *What is your latest approved method of terminating Parkway cable at the rail, and in relay cases?*

(2) *What is the best method of attaching a ground wire to a ground rod or pipe?*

(3) *What are the advantages or disadvantages of glass insulators as compared with porcelain insulators for low-voltage line control circuits?*

(4) *How are single track signals controlled so as to discriminate between opposing and following trains?* (*$5 will be paid for the most simple explanation of methods to provide directional control of single track signals.—Editor.*)

Is Approach Lighting of Signals Really Economical?

"In your opinion what are the advantages or disadvantages from a train operating standpoint, of the practice of approach lighting automatic block signals?"

Approach-Lighted Signals Are Very Effective in Compelling Engineman to Be Alert—Rear End Inspection of Signals for Opposing Train Movements Not Recommended

ON the New York Central Lines West, we approach-light our colorlight signals. The situation in the territory where we have colorlight signals made it necessary that we approach-light the signal for the reason that the power company from whom we obtain current, reserve the right to shut down the power at any time to make repairs or make extensions. This necessitated using power-off relays and storage batteries for reserve power for lighting the signals.

The advantage of approach lighting lies in its greater economy. The bulb life is longer and when the lighting is from the reserve battery, the battery will hold up much longer. It is also possible to use a battery of less capacity than would be required if lights were burning constantly. I have found in making inspections over the road that an approach-light signal is very effective. It is my opinion, these signals tend to keep the engineman alert as he is always, when passing a signal, watching for the next one to light up.

There are no disadvantages, except the possibility of an engineman being fearful that the signal will not light up and that he may pass the signal should it for some reason fail to light up. This however, is overcome by having the signals properly spaced so that the engineman is given ample opportunity to apply the brakes and stop his train before reaching the signal should the signal fail to light up after the train has passed the preceding signal a reasonable distance. The other so-called "disadvantage" is the impossibility of inspecting the lights on signals from the rear of the train for train movements in the opposite direction in multiple-track territory. This is not serious because an inspection from the engine is more satisfactory, and provides a truer condition of the signal lights.

Cleveland, Ohio. F. B. WIEGAND,
Signal Engineer, New York Central.

Longer Lamp Life and Reduction in Train Stops Is Source of Greatest Economy

THE approach lighting of automatic signals is economical because the lamp is only lighted when it is being used. This results in a greater increase in the time the lamp may be kept in service, necessitating less frequent renewals with consequent economy in lamp and energy expense. Longer lamp service means less frequent burnouts, resulting in less train stops due to an improperly displayed signal. The decrease in the number of train stops is the source of the greatest economy.

Cincinnati, Ohio. C. F. STOLTZ,
Signal Engineer, Cleveland, Cincinnati, Chicago & St. Louis.