

size, leaving only a very small center hole, the distinction between the different ways of controlling the signal, which is indicated inside of the circle, will be so small as to be hardly noticeable, especially after a blueprint of the tracing has been made.

The writer would suggest that, instead of employing circles, the space thus occupied be used with advantage to indicate how the signals are controlled, while the remaining part of the blade would indicate the different aspects which the signals display, as shown in Fig. 1. By substituting a square for the circle more space is available for the indication of the controlling power. It might be argued that it will be as difficult to draw the circle inside of the blade which requires special note; but in this case it can be drawn after the signal symbol is completed, which is not possible with the other symbols. The writer has also tried to improve upon the two special symbols, as shown on the opposite page.

As an example of the inconsistency of the proposed standards, it is said on page 131 of your April issue: "It will be noted that a marker light is shown by a circle. If a signal arm were used instead of a light, as is standard practice on some roads, it would be necessary in the case of the vertical light to remove the circle and substitute an arm, but in the case of staggered lights it would be necessary to leave the circle and add the arm, and in this case the signal arm would show a circle at the left."

Certainly it would serve no purpose to leave the circle in case an arm was added to the symbol with the vertical lights, as, where no circle is shown, the lights are vertical, and *vice versa*; and where one circle is shown the lights are staggered.

April 29, 1911.

J. B. A.

THE ABSOLUTE—PERMISSIVE SYSTEM.

TO THE EDITOR OF THE SIGNAL ENGINEER:

This is to call attention to the fact that the series of signal aspects and indications shown on page 145 of your April issue, while in accordance with the hurriedly prepared paper as originally presented by the writer, was subsequently revised in a number of details, all as shown in the appendix, which formed part of the paper as finally revised and from which the article as it appears in your paper was supposed to have been taken. The writer therefore wishes it understood that the series of aspects and indications as shown is not in accordance with his wishes. He also desires to call attention to the fact that the title of, and the short statement which precedes, the article as it appears convey the impression that it all has to do with the Absolute-Permissive block system, which is not the case, only a very short space being devoted thereto (see page 148, descriptive of Figs. 20 to 29, inc.).

W. K. HOWE.

Rochester, N. Y., May 5, 1911.

RELEASING ELECTRIC DETECTOR LOCKING.

TO THE EDITOR OF THE SIGNAL ENGINEER:

I would like to get from your readers opinions on the advisability of providing means of releasing electric detector locking at interlocking plants where detector bars are not used. Some roads make it necessary to call a repairman to release the machine if the detector locking fails, others provide a seal instead of a lock on the electric lock case and require the signalman to furnish an explanation every time the seal is broken, and hold him responsible for anything that may occur, while still others provide some sort of slow release,—sometimes sealed, sometimes not sealed. The argument against any means of releasing is that with such a device in operation a switch or derail might be moved under a train even though no signal could be cleared. On the other hand, if no means are provided, serious delays are likely to occur before the repairman can get to the tower. The fundamental question is this: Should we trust the signalman sufficiently to allow him, in emergencies, to operate a plant without detector protection, making him personally responsible for the consequences, or shall we accept delays to traffic?

Chicago, Ill., May 8, 1911.

W. H. ARKENBURGH.

INDIANA RAILWAY COMMISSION MEETING.

The Railway Commission of Indiana held a meeting on Thursday, May 4, 1911, with the committee appointed some time ago to investigate and report on block signals. The members of the committee are Arthur W. Brady, of the Indiana Union Traction Co.; Will G. Irwin, of the Indiana, Columbus & Southern Traction Co.; Robert I. Todd, of the Terre Haute, Indianapolis & Eastern Traction Co.; and M. H. Hovey, block signal expert in the employ of the commission.

The committee, together with members of the commission, made an inspection of the installation of single-track automatic block signals recently put in by the Kinsman Block System Co. on the line of the Terre Haute, Indianapolis & Eastern, just west of Indianapolis. The installation comprises two signals of the three-position upper left-hand quadrant type, operated by short track sections, counter devices being used. The block covers the distance between two passing tracks. Three line wires are required for the operation of the signals. The signals stand in the clear position, and a train approaching the block operates the signal at the entrance end, causing it to move to the 45-deg. position, this movement being a positive indication that the signal at the opposite end of the block has moved to, and is set in, the stop position. The signal at the entrance end of the block remains in the caution position, and a second car upon approaching the block at the same end causes the signal to move to the clear position and immediately return to the caution position, indicating that a second train had been counted into the block, and also that the block was already occupied by a car moving in the same direction. The car will be counted out upon leaving the block at either end, and both signals assume the clear position when all cars have left the block. The signals are operated by a top-post mechanism recently designed by the Kinsman Block System Co., and the signal is cleared by a rotating armature operated by the trolley current.

On Saturday, May 6, the commission inspected the installation of single-track automatic block signals on the New York, Chicago & St. Louis, between Dunfee and South Whitley, just west of Fort Wayne, Ind. This installation comprised a number of three-position upper right-hand quadrant signals spaced about one mile apart, and so arranged that a train upon leaving one station sets all signals between that station and the one toward which it is going, in the stop position for opposing movements, at the same time allowing for a close follow-up movement. With this arrangement it is impossible for two trains to meet between passing sidings. The first signal on each side of a passing siding is provided with a second fixed arm, and the rules provide that no train shall pass this signal when it is in the stop position except upon instructions from the dispatcher. Telephones are installed so that communication with the dispatcher may be had. This installation has been in preliminary operation for about three months and is reported to be giving very satisfactory service. The signals were installed by the American Railway Signal Co., Cleveland, Ohio.

S. M. RANSOME in "Machinery" recommends the following method for restoring blueprints that have been over-exposed: The over-exposed print should be taken from the washing tank as soon as it is discovered that it has been exposed too long, and, while still wet, laid face upward on a table. An unexposed dry piece of blueprint paper should then be laid over the wet one, with its printing side down. The back of the unexposed piece should then be rubbed with a piece of cloth or with the hands. This brings the two printing surfaces into intimate contact, and when the dry piece is removed it will be found that the over-exposed print is perfectly clear and of a rich blue color. In fact, the color obtained by this method is generally better than that secured by the original exposure and development. The only objection to this scheme lies in the necessity for wasting a good piece of blueprint paper for each print of this kind.