One can imagine a busy point protected by an interlocking plant, the machine of which is not equipped with lever or latch locking. Serious delays would be caused by a signalman not setting up the right combination of levers, who might, thinking he had, start looking for trouble at the very many points trouble could be expected to exist. While interlocking plants could be maintained and operated without lever or latch locking, it is my opinion that it is best to retain such safeguards. Machines for classification yards should, in my opinion, never be classed as interlocking machines.

Electrical “Safety-First”

“What safety measures are enforced to protect signalmen from electric shocks? How should breathing be restored artificially in a man who has been knocked unconscious by accidental contact with a high voltage circuit?”

440-Volt Signal Power Line Must Be Handled Carefully Because of Danger from Possibility of Higher Voltages Coming in Contact with Line

By R. A. Sheets

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A LTHOUGH 440 volts, 60 cycles a-c is the highest voltage used by the signal department on this road in open line construction (we have a 6,500-volt line in underground cable), we have endeavored to instruct all men as though it were a high-tension line.

First, it is distinguished by being of No. 6 copper, located on pins 1 and 2 of the top arm on the track side of pole line and is carried on porcelain insulators as distinguished from other circuits carried on glass insulators. Second, vertical drops are either rubber-covered wire or line wire insulated with sections of second-hand Oxweld hose. Third, the line is properly and frequently sectionalized by the use of primary plug cut-outs and these are also used at all transformer locations for sectionalizing such transformers. Fourth, the lines are properly drained of static charges by lightning arresters. Fifth, enclosed safety switches are used in all housings and all open terminals are insulated to guard against accidental contact. Otherwise standard construction is used.

The men are urged to observe these safeguards and not to handle the 440-volt line carelessly. We have cautioned them that though this voltage in itself is not generally considered dangerous enough to kill a man, there is always the chance of some 2,500-volt line falling down on the signal power line. There is also the chance of a lightning discharge running throughout the 20-mile section of the transmission line even though the sun may be shining where the men are working. Linemen must always discharge an open line to ground with a wire before actually coming in contact with it. Methods of resuscitation from electric shock are studied and booklets are furnished to all but no examinations are held.

Correction.—On page 474 of the “What’s the Answer?” section of the December issue, an error in spelling the name of one of our contributors has been noted. Robert Lang, signal maintainer, New York Central, at Suspension Bridge, N. Y., was the author of the reply suggesting methods for overcoming frost trouble on motor brushes, his name being incorrectly shown as R. Laney.