# EDUCATIONAL MEETINGS ON THE ILLINOIS CENTRAL

THE monthly meeting of the signal employees of the Illinois Central was held at Mattoon, Ill., on Sunday, February 13. B. F. Hines, southern manager of the Primary Battery Division, Thomas A. Edison, Inc., gave an address on primary battery, explaining in detail the



Some of the Men at the Meeting

process of manufacture and the rigid inspection and tests to which their product is subjected. He explained the causes and remedy for some of the known failures of battery, such as the scaling of the copper oxide plates which has been the cause of some signal failures during the past year, and stated that this defect had been overcome. A soda cell was set up and each move was explained in detail with a great deal of stress laid on the accuracy required to get the right chemical action which insures the rated capacity of the cell. He was interrupted many times while mixing the cell to answer questions.

### The March Meeting

The March meeting was held at Gibson City, Ill., on March 13, at which time Fred J. Stender, representing the Adams & Westlake Co., explained the difficulty experienced in the development of the "Adlake" semaphore lamp. The interlocking plant and automatic signals at that place were inspected and Mr. Stender continued his explanation on lamps in actual service.

Guy Fox, chairman of the committee studying compensation, asked several questions which started a spirited discussion, and through the medium of the portable blackboard several problems were presented and solved.

### Other Business

The holding of the meetings at different points affords an opportunity for the men to inspect various installations in service and at the same time equalizes the distance travelled by all the men. The Illinois Central signal men



have adopted the motto, "Use Your Head and Muscles, Too."

The April meeting will be held at Champaign, Ill., on April 17, when C. B. Griffin of the Rail Joint Co. will explain the best methods of maintaining insulated rail joints. This subject is of interest to the track department as well and it is expected that all the track supervisors and as many section foremen as possible will attend the meeting.

## WHAT'S THE ANSWER?

SEVENTEEN solutions were received for the tower issues. The problem shown in the February and March issues. The problem was, to draw the connections so that switch A or B will light one of the lamps and at the same time turn the other one off. When switch C is on both lamps should burn. When properly connected, either



one or the other of the lamps will be burning when switch

C is off. The lamps are designed to burn on 110 volts. All of the solutions cannot be shown, but Fig. 1 is typical of the majority of the answers. Another solution somewhat different is shown in Fig. 2.

Solutions for the above problem were received from E. H. Naylor, Henry Lee, Guy Keating, H. W. Smith,



E. L. Koenig, I. T. Kauffman, H. R. Wasmer, C. A. Parker, E. Wade, T. Gigg, R. C. Bailey, Paul E. Dahn, G. N. Pelton, H. G. Gould and P. K. Milligan.

### The Resistance Problem

#### No. 3

Several solutions for resistance problem No. 3, shown in the March issue, have been received. The problem, which is again shown in Figs. 5 and 6, was, to solve for the resistance from A to the ground, considering all the connecting wires as having no resistance.

Paul E. Dahn of Washington, D. C., sent in the solution shown in Fig. 5, which is explained as follows:

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