

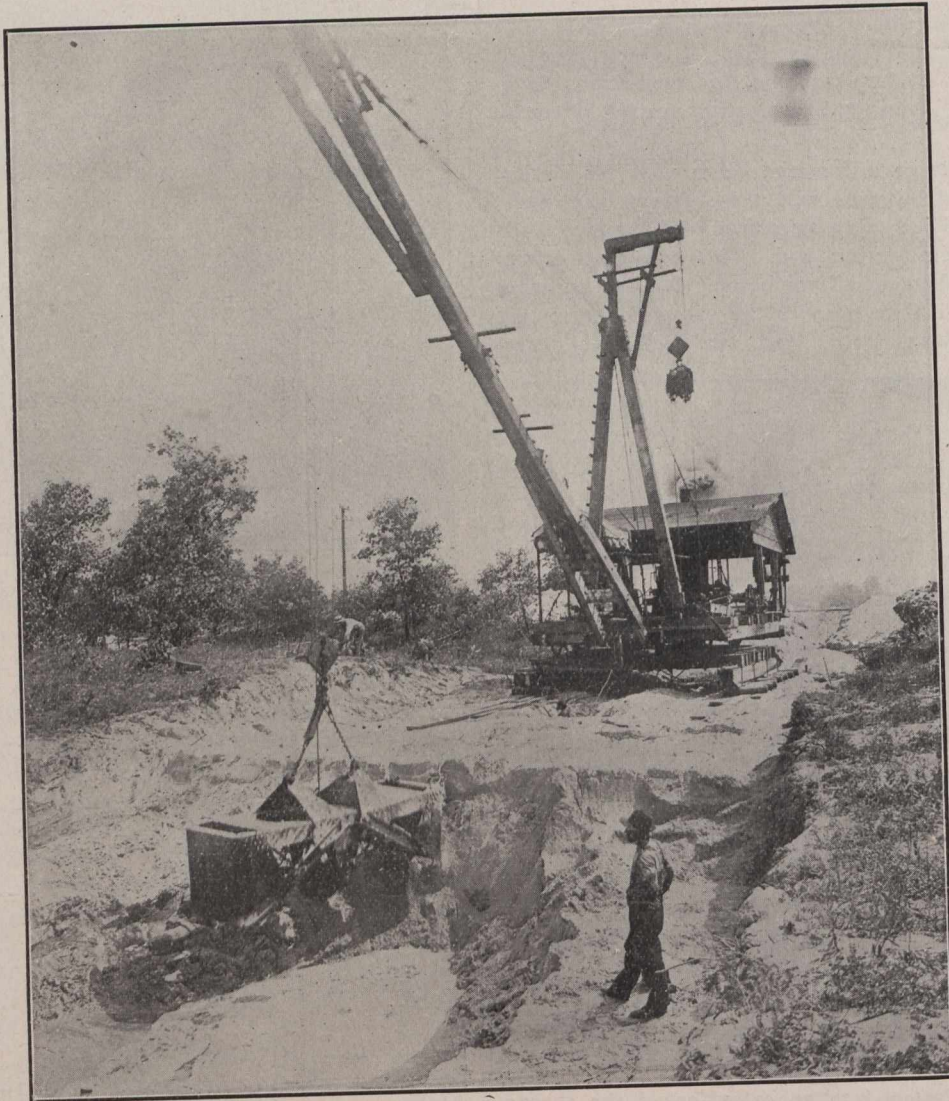
cases for grab bucket dredges, as the action of water and super-imposed material so packs it that the penetrating power of an orange peel is required while at the same time the form of scoops of the clam-shell is needed to retain the readily flowing mixture resulting from the stirring that the orange peel points give it. For these reasons such material has been most successfully handled up to the present time only by the expensive hydraulic or dipper dredges. Under

cation, of which W. J. Eck, of the Southern, is chairman, and A. D. Cloud, of the Signal Engineer, is vice-chairman. This is a thorough and exhaustive work. The principal items in the order of business for the annual meeting are as follows:

Tuesday, October 11.

10.00 a.m.—Opening.

11.15 a.m.—Proposed Amendments to the Constitution.



such conditions this new grab promises considerable for the contractor for it has proven its ability to handle such materials in a very satisfactory manner.

For economy in operation it is necessary that the ratio of the weight of the bucket to the total weight lifted must be kept as low as possible. Digging power may be increased by weight alone but this is at a sacrifice of economy. The makers of this grab claim that it will handle more material per pound weight of grab than any other.

RAILWAY SIGNAL ASSOCIATION.

Secretary C. C. Rosenberg has issued an advance notice of the annual meeting at Richmond, Va., in October. A separate supplement, filling 183 pages, contains an elaborate index to signal literature, which has been prepared by a special committee for the promotion of signaling edu-

12.00 noon.—Mechanical Interlocking.

2.30 p.m.—Power Interlocking.

4.30 p.m.—Signal Practice.

Wednesday, October 12.

9.00 a.m.—Report of Sub-Committee on Standards.

10.30 a.m.—Automatic Block Signaling.

11.30 a.m.—Electric Signaling for Electric Railroads.

12.15 p.m.—Automatic Stops and Cab Signals.

1.30 p.m.—Adjourn for the day. Visit Exhibits.

Thursday, October 13.

9.00 a.m.—Wires and Cables.

10.45 a.m.—Storage Battery.

11.15 a.m.—Signal Failures.

H. M. Buck, secretary of the Signal Appliance Association, 30 Church Street, New York City, has issued the announcement of the arrangements for exhibits at Richmond, together with a program of the social functions proposed in connection with the annual meeting.