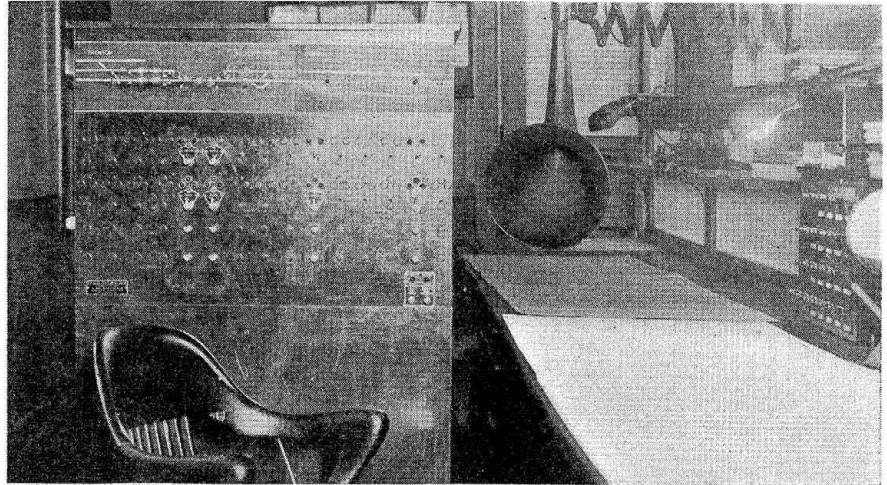


## C. R. I. & P. Extends Centralized Control

System permits use of  
single track through  
section involving  
several bridges—

Spring switches  
used to advantage



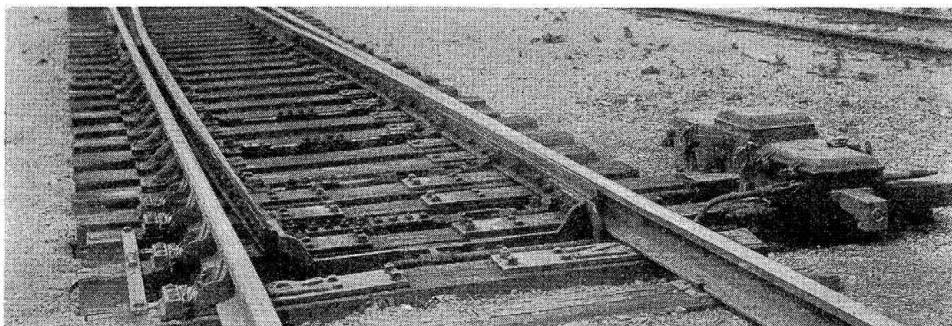
**C**ENTRALIZED traffic control, automatic signaling, and spring switches are used to decided advantage on that section of the Chicago, Rock Island & Pacific's new line between Trenton, Mo., and Polo, 46 miles. The purpose of this new line and the details of its construction were described in an article in the Railway Age for November 21, 1931, and the application of centralized traffic control on the section between Polo and Birmingham, operated jointly with the Chicago, Milwaukee, St. Paul & Pacific, was explained in an article in Railway Signaling for November, 1931. The following article is devoted to the signaling facilities of the Trenton-Polo section.

### General Layout

Starting from Trenton, the Rock Island constructed 2.3 miles of double track to Lake on a revised alignment and reduced the grades to a maximum of 0.5 per cent, while between Lake and Hickory Creek, 2.8 miles, the alignment of the old single-track line was revised. It is of interest to note that this latter section includes crossings of two major streams involving steel bridges more than 720 ft. long and six trestles, ranging from 100 to 200 ft. in length, over minor streams and drainage

ditches. It was estimated that the bridges which would have been required if a second track had been provided in this section, would alone have cost more than \$175,000. A study indicated that centralized traffic control, including power-operated switches, would assist in increasing the track capacity of this section sufficiently to meet the requirements for years to come, thus obviating the necessity for second track. The result was that such a system was installed. As finally determined, the old single-track line was left in service between Hickory Creek and Coburn, 4 miles; beyond which point the old main line extends westward toward St. Joseph. A new second main line was constructed on a new low-grade alignment from Hickory Creek to Shearwood, from which point a track connects with the St. Joseph main line to Coburn. From Shearwood a new single-track line extends for 33 miles to Polo, at which point connection is made with the new double-track line used jointly with the Milwaukee. Passing tracks, long enough to handle tonnage trains, are located just east of Lock Springs and just east of Polo. At Lock Springs the line crosses a single-track line of the Wabash.

The signaling of this line between Trenton and Polo, therefore, involved not only automatic block but also the handling of the switches at the ends of double track at



Above—The control machine at Trenton is handled by the dispatcher  
Left—Dual-control power switch machine at Coburn





