

The Rock Island Develops

# Unique Interlocker

*with No Mechanical Locking*

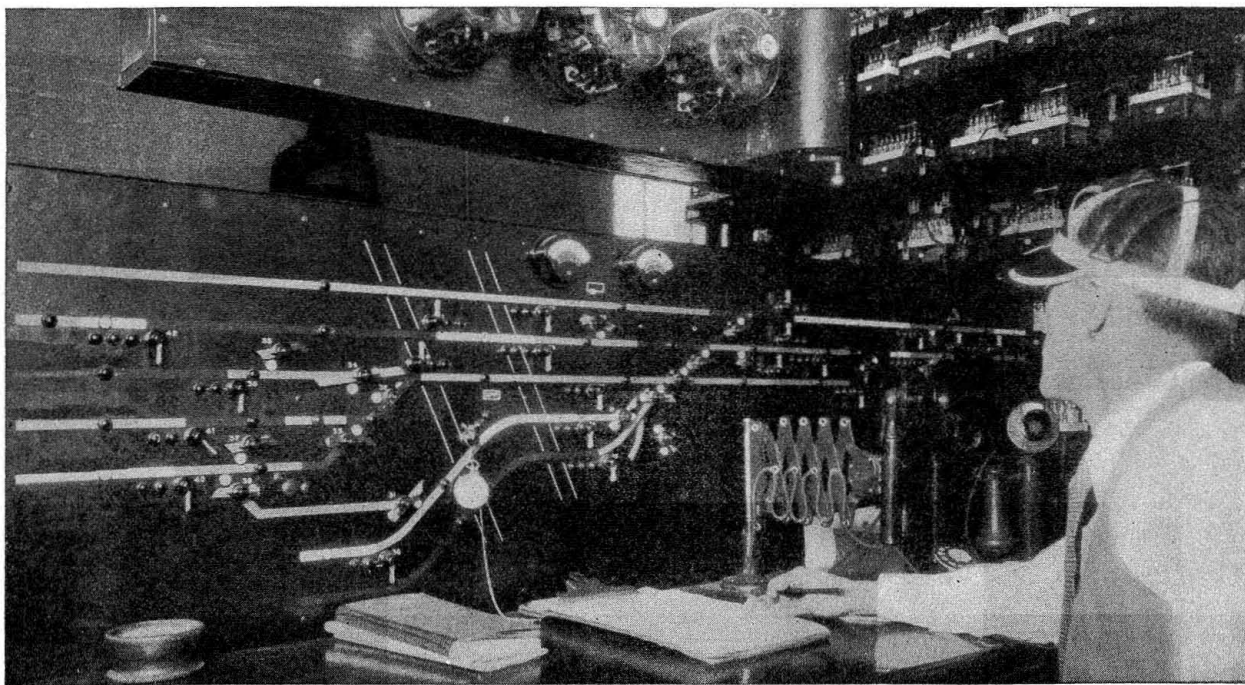
*Levers for switches and signals form a part of the track diagram—  
First plant of its kind*

By Leroy Wyant

Signal Engineer, Chicago, Rock Island & Pacific

A 42-LEVER electric interlocking plant including a new and novel type of control machine, has recently been placed in service by the Chicago, Rock Island & Pacific at Blue Island, Ill., near Chicago. This development is the result of an effort to accomplish three major things: First, to secure a simple assembly of levers so that the leverman can sit at a desk and operate a maximum-size layout, while using the telephone or making records of train movements; second, to reduce the size of the machine to the absolute minimum so that it can be housed in

crossover levers appearing as short sections of the track, and the signal levers resembling semaphore blades. The interlocking machine is, therefore, a unique development and is believed to be original, having been developed by the signal department through the co-operation of the Chicago Railway Signal & Supply Company (now Railroad Supply Company), and the Automatic Electric, Inc. Although the interlocking machine represents a new development, practically all of the detail pieces of apparatus involved are standard devices which have



A close-up view of the illuminated diagram and levers

a small space, and, third, to provide a self-indicating arrangement so that anyone familiar with ordinary railroading can operate the layout and know by glancing at the board exactly what route is lined up and the location of every train within or approaching the plant.

The fundamental changes in this new machine as compared to the conventional type interlocking are: First, the customary mechanical locking between levers, as well as electric locks on the levers, have been eliminated, the locking being accomplished by circuits especially designed for this purpose by the railroad; second, the levers themselves are mounted on the illuminated track diagram, the switches and

been used extensively for years by the Automatic Electric, Inc., in the automatic telephone and remote-control fields.

### Track Layout and Traffic

The complicated track layout and the diversified traffic involved, introduced several problems in the development of the plant. Heretofore, some of the main-line switches had been handled by switchmen, while the yard switches were handled by trainmen. This method not only caused delays and train stops, but necessitated slow speeds in this territory, which introduced delays to other trains and blocked the street crossings.





