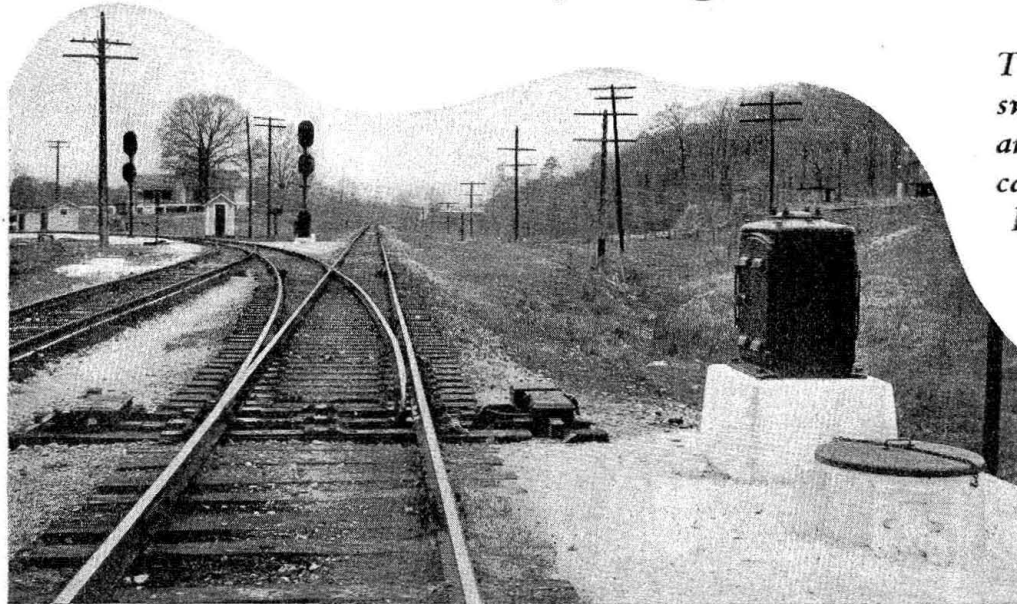


Rock Island Uses Novel System for Operation by Signal Indication



Two remote power switches, a spring switch and a yard track indicator expedite trains at Hot Springs Junction

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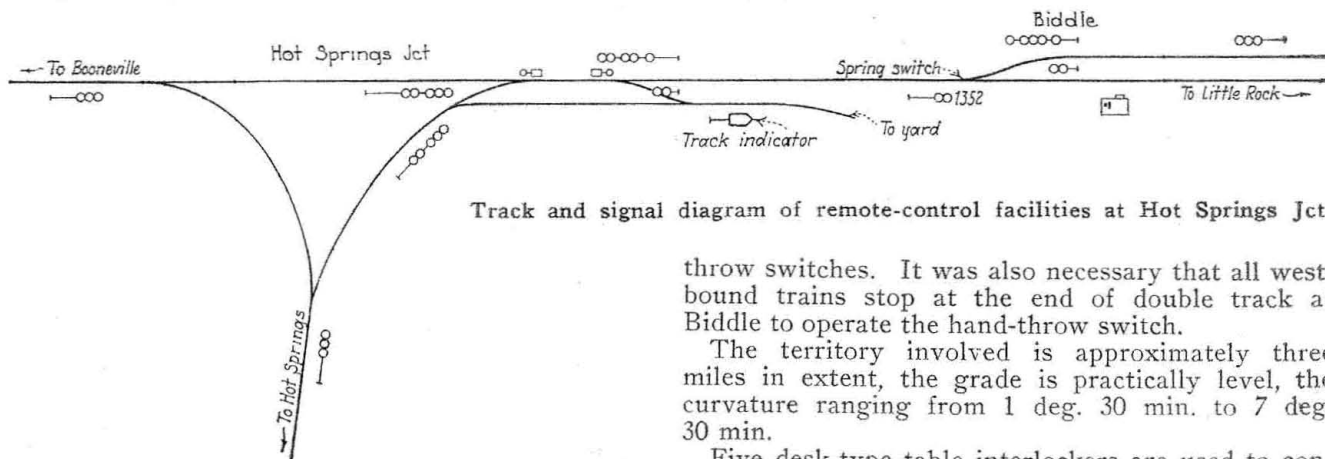
Remote-power switch with dual-control mechanism

A CREDITABLE saving in train operating costs has been achieved by the Chicago, Rock Island & Pacific as the result of a recent installation of remote power switches and associated signaling equipment at Hot Springs Junction, Ark. A striking feature of this installation is the use of a large yard-track indicator, which in appearance resembles the annunciators commonly found in Pullman cars, this yard track indicator being located on the yard lead for the purpose of informing trainmen as to which track they should enter. The track and signal layout between Biddle, Ark., and Hot Springs Junction is shown in Fig. 1.

The new arrangement permits the elimination of 21 passenger train stops and 20 freight train stops daily, or a total of 14,965 train stops annually. Every passenger train stop eliminated saves at least

such a great assistance in facilitating train movements in this area that it is rather difficult to place a definite money value on these results. However, it is readily apparent that the installation is an economic success, as well as being a decided assistance in train operation.

Within this territory, trains are operated by signal indication entirely, train orders, time table superiority of direction and class being suspended. In this absolute block territory, permission to use the hand-throw switches must be secured from the operator through the medium of the telephone system. Prior to the present arrangement, trains were operated through this territory by means of train orders, time tables and manual block signals. It was the practice to stop all trains at Hot Springs Junction for the purpose of registering and operating the hand-



Track and signal diagram of remote-control facilities at Hot Springs Jct.

three minutes and each freight train stop at least seven minutes. This would total 382 train-hours for passenger trains and 851 train-hours for freight trains annually. The elimination of these delays is

throw switches. It was also necessary that all west-bound trains stop at the end of double track at Biddle to operate the hand-throw switch.

The territory involved is approximately three miles in extent, the grade is practically level, the curvature ranging from 1 deg. 30 min. to 7 deg. 30 min.

Five desk-type table interlockers are used to control nine signals and two power switches, there being no mechanical locking between levers as all checking is done electrically. The usual type of illuminated track diagram is used with releases, and the "track indicator" control dial is located on the

