Big Economies effected by at East St. Louis Hump

On February 8, 1926, the G-R-S Car Retarder System installed at East St. Louis Hump, Illinois Central Railroad was placed in service.

This system, consisting of electrically operated apparatus enables four men, each located in a tower, to control the speed of cars after they are cut at the top of the hump and to control the movement of switches and the operation of skates within the entire yard. These four men by means of the G-R-S System perform the combined functions of braking cars by car riders, of throwing switches by switch tenders and of placing skates manually. The speed of cars can be so nicely controlled and their routes so quickly established that they can be uniformly delivered to their proper classification tracks with just sufficient force to couple up with the next car ahead without undue shock to cars or ladings.

An annual saving of \$160,000 or $27\frac{1}{2}\%$ reduction in operating costs is conservatively estimated to be effected by this installation.

Nor is this the only economy or benefit to be derived from G-R-S Retarders.

Yard capacity is largely increased with practically no increase in cost,

Blizzards and bad weather have little or no effect on operation,

No waiting for additional car riders when peak volume occurs,

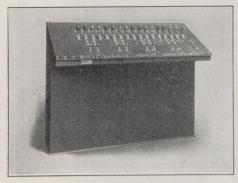
Damage to cars and lading practically eliminated, Big reduction in personal injuries.

If you desire to secure such economies and benefits communicate with our nearest district office. Our engineering experts on car classification yards are at your service, without the slightest obligation on your part. Bulletin 147, "The Rolling Car Gathers the Profit," on request.



GENERAL RAILWAY SIGNAL COMPANY

GRS Car Retarder System Classification Yard



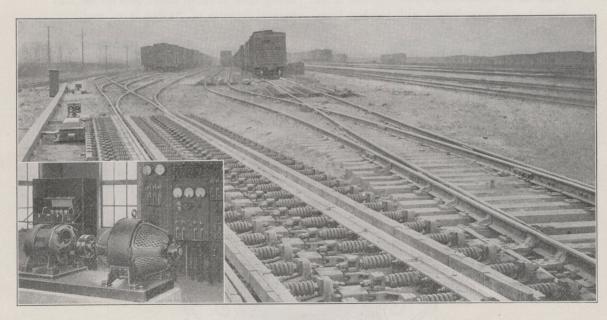




A Few Features of the Retarder

- 1. Increase speed available for an emergency condition by depressing button on top of retarder lever.
- 2. Movement of retarder either forward or reverse can be secured without any unnecessary loss of retardation.
- 3. Articulated construction of retarder members increases efficiency, reduces power consumption, allows installations on curve track and reduces binding effect when track settlement occurs.
- 4. Individual adjustment provides for the position of each retarder shoe and the tension of each retarder spring.
- 5. An overall adjustment is provided to take up shoe wear.
- 6. Springs can be easily removed and replaced.

- 7. All spring pressure is approximately on horizontal center of area where retarder shoes engage wheels, thus minimizing any cramping or binding effect in the moving members.
- All forces self contained and not transmitted to mechanism.
- 9. No rivets used in retarder assembly.
- No concrete foundation required for retarder mechanism.
- 11. Failure of power leaves available any retardation which was set up at the time of power failure.
- 12. Only one kind of power required and that electrical, which is not affected by low or changing temperatures.



A590

ROCHESTER, NY



St. Louis

Montreal

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