

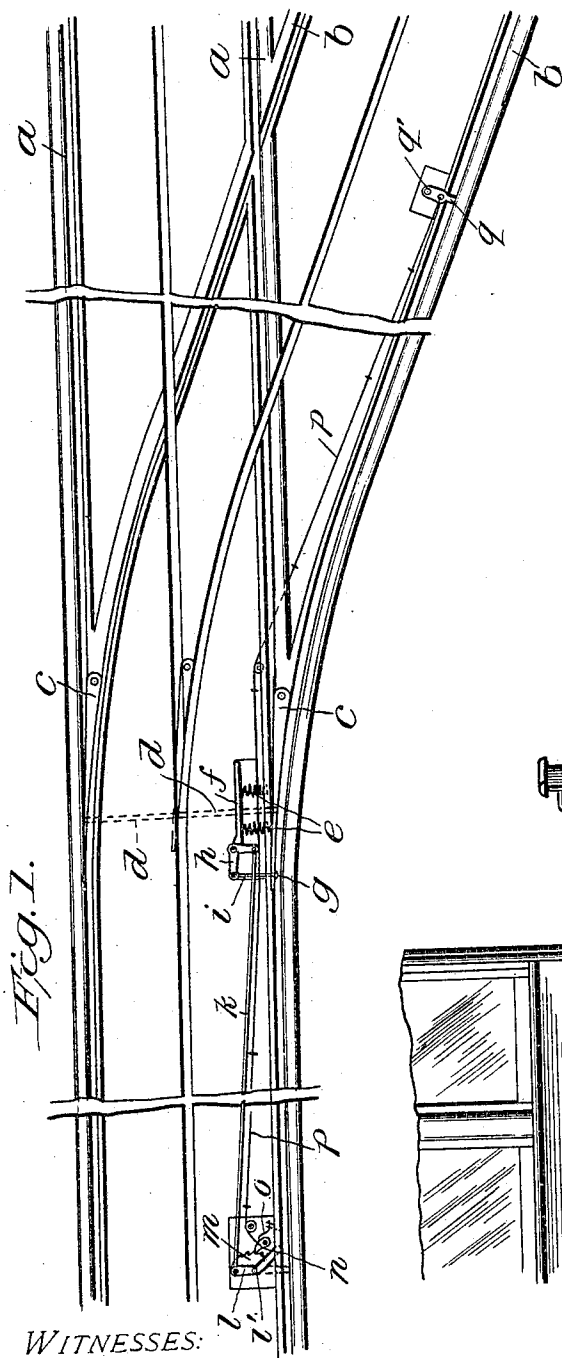
No. 819,619.

PATENTED MAY 1, 1906.

C. TREBESINER.

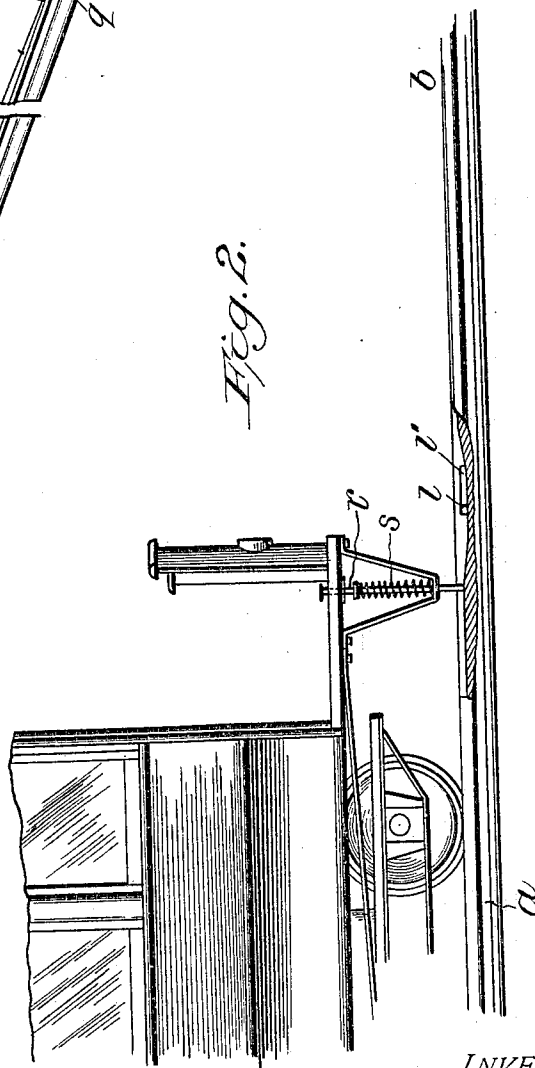
DEVICE FOR SETTING SWITCHES BY THE MOTORMAN FROM THE CAR.

APPLICATION FILED OCT. 11, 1905.



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DEVICE FOR SETTING SWITCHES BY THE MOTORMAN FROM THE CAR.

No. 819,619.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed October 11, 1905. Serial No. 282,297.

To all whom it may concern:

Be it known that I, CARL TREBESINER, a subject of the Emperor of Austria, residing at Pittsburg, in the State of Pennsylvania, United States of America, have invented certain new and useful Improvements in Devices for Setting Switches by the Motorman from the Car, of which the following is a full, clear, and exact specification.

The present invention relates to a device for moving the switch-tongues of railroad-tracks from the car. The motorman presses with his foot a rod down into the groove of the rail, so that when the car is approaching the switch the rod strikes and actuates a system of levers by which the switch is set, as will be hereinafter described.

Provisions are made that the switch remains under tension in the said position till the car or train passes over to the branch track and then the depressed rod strikes a lever by which the switching device is disengaged and the switch-tongues are free to return into their normal position.

In the accompanying drawings, forming part of this specification, the device is shown in Figure 1 by a plan view; and Fig. 2 shows in side elevation the front end of a car and the rail, part of which is shown in longitudinal section.

a a indicate the ordinary grooved rails of a street-car track with the slot between them.

b b are the rails of a side track, and *c c* are the switch-tongues, which are connected together in the ordinary manner—for instance, by cross-ties, (indicated in dotted lines *d*)—so as to swing together when one of the tongues is moved.

Springs *e* are arranged to rest with one end against the wall *f* of a suitable casing, embedded in the ground under the pavement, while the other ends of the springs press one of the switch-tongues in place to close off the side track and the car will run on the straight track without being switched off, as the switch-tongues are connected as above indicated. The front end *g* of these spring-actuated tongues *c* is connected to a bell-crank lever *h* by a link *i*, and the other arm of said bell-crank lever is connected by a long rod *k* to a lever *l*, having its fulcrum on a pin *l'* and being protected by a suitable casing under ground.

The free end of the lever *l* reaches through a slot *l''* into the groove of the rail, which is preferably deepened, as shown in Fig. 2, so

that the flange of the wheels in passing over will not come in contact with the lever. Said lever *l* is provided with a tooth-sector *m* and a pawl *n*, pivoted in the casing, adapted to engage the ratchet-teeth of the sector. The pawl *n* is under pressure of a spring *o* and is connected by a chain-wire-rope, or other flexible element *p* to a lever *q*, which is embedded with its casing far ahead on the side track, as shown in Fig. 1. The lever *q* turns around a pivot *q'* of its protective casing. The chain or rope *p* may be guided through rings and over pulleys, and the whole system may be inclosed in a long casing or box embedded under the pavement.

r, Fig. 2, is a rod vertically arranged and suitably guided at the front end of a car, having a head upon which the motorman can place his foot. A spring *s* has the tendency to raise the rod ordinarily into an elevated position, so that the lever end is above the level of the rails. When the motorman does not use the switch, the rod *r* glides over the lever *l*, which is ordinarily in the dotted position, Fig. 1; but when the motorman wants to branch off and he presses down the rod *r* the lower end of the same will come in contact with the lever *l* and swing it in the slot *l''* into the position shown in full lines on the drawings. The pawl *n* will hold it in this position, and by the turning of the lever a bell-crank lever *h* will turn and the tongues will be pulled into the switching position, thereby compressing the springs *e*, as will be easily understood. The device will be disengaged only when the car or train approaches the lever *q* ahead. The rod *r* will strike this lever, and by means of the chain *p* the pawl *n* will be pulled out of engagement with the teeth of ratchet *m*, whereupon the springs *e e* immediately throw the parts into normal position as soon as the rod *r* has passed the lever *q*.

Having thus described my invention, what I claim is—

1. Switching device for railroad-tracks comprising a lever suitably connected to the switch-tongues under spring-pressure and provided with means to retain said lever in the said position, compressing the spring, and provided with means to be disengaged, said lever having its free end in the bottom of the groove of one of the rails and comprising a spring-actuated rod on the car adapted to be pressed with its lower end into said groove substantially as described and for the purpose set forth.

2. Switching device for railroad-tracks
comprising a lever *l* connected by a rod *k* and
a bell-crank lever *h* with link *i* to one of the
switch-tongues under spring-pressure, and
5 provided with a tooth-sector *m* and a pawl *n*
to retain said lever in the said position, com-
pressing the springs, said pawl being con-
nected by a chain to a lever *q* ahead of the side
track, and entering into the groove with its
10 free end, said lever *l* having its free end in the

bottom of the groove of one of the rails and
comprising a spring-actuated rod on the car,
adapted to be pressed with its lower end into
the groove, substantially as described and
for the purpose set forth. 15

In testimony whereof I affix my signature.

CARL TREBESINER.

In presence of—

GEO. HEINIOKE,
G. DITTMAR.