(No Model.)

J. P. HOLEDGER.

STREET RAILWAY SWITCH APPLIANCE.

No. 482,903. Patented Sept. 20, 1892.

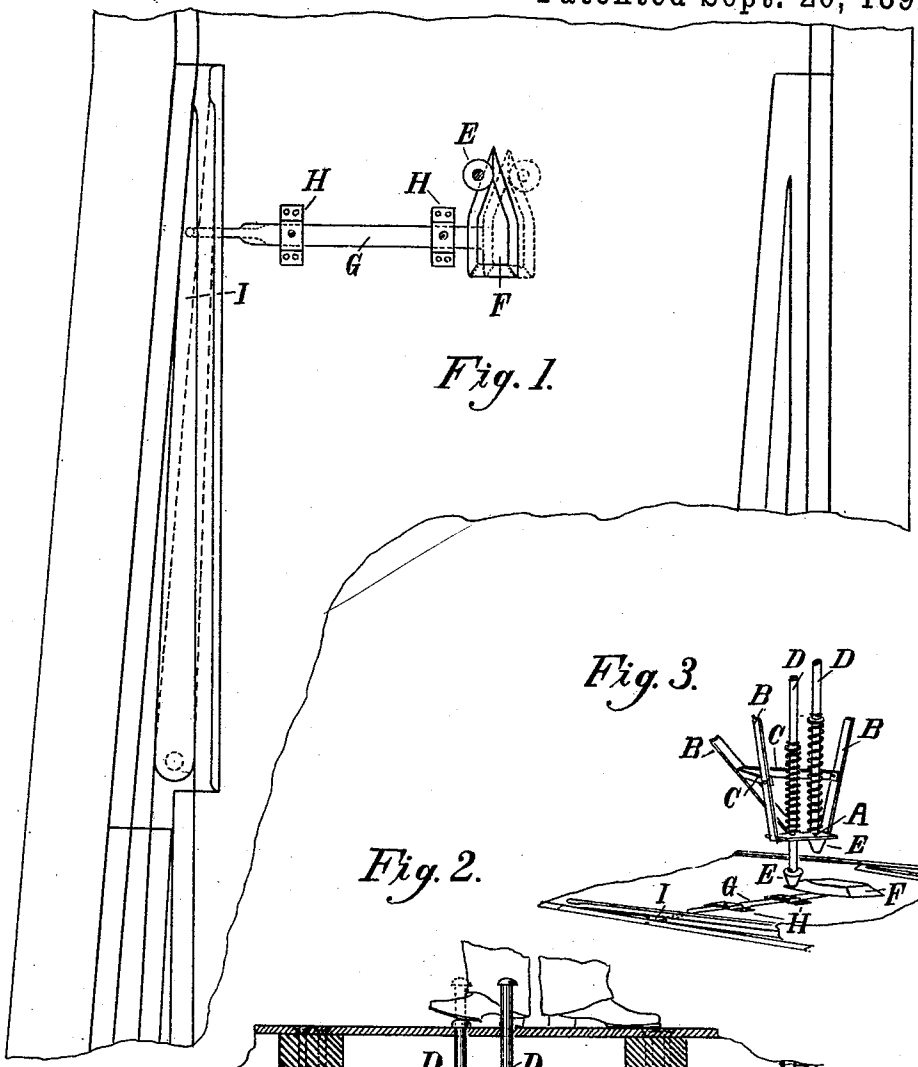


Fig. 1.

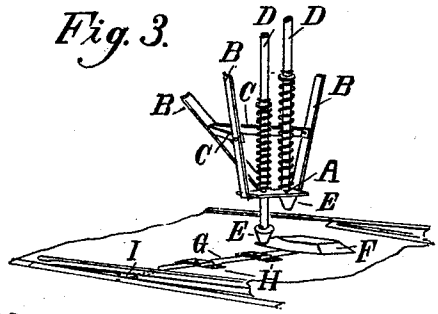
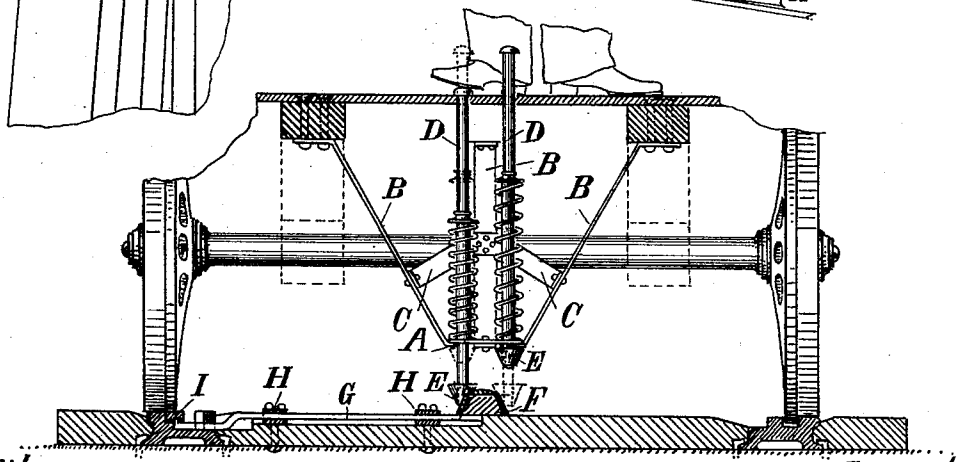


Fig. 3.

Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES POLK HOLEDGER, OF SPOKANE, WASHINGTON.

STREET-RAILWAY-SWITCH APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 482,903, dated September 20, 1892.

Application filed January 11, 1892. Serial No. 417,703. (No model.)

To all whom it may concern:

Be it known that I, JAMES POLK HOLEDGER, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful Automatic Street-Railway-Switch Appliance, of which the following is a specification.

My invention relates to a new and original device by which street-railway switches may be adjusted either way by the gripman and not impede the progress of the car. Therefore the object of my invention is to render it unnecessary to relax or stop the car while adjusting the switch, as heretofore, and at the same time to greatly facilitate the working of switches. This I accomplish by a stirrup bolted to the bottom of the car, which holds two vertical rebounding pedal-rods provided with antifriction bevel-rollers, which operate in conjunction with a wedge-shape block or shoe that is connected with the switch by means of a horizontal bar. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the switch, the horizontal connecting-bar, and the shoe as it appears when about to be adjusted to the right by the antifriction bevel-roller. Fig. 2 is a vertical section of the entire device, showing its connection with the car and the switch; and Fig. 3, a detailed view in perspective of the device cut off from the car.

Similar letters refer to similar parts throughout the several views.

The table or guide-plate A, its hangers B B B, and their braces C C constitute the framework of the contrivance, which is secured to the bottom of the car-frame with bolts. Through plate A pass rods D D, which are held up from obstruction by spiral springs and provided at the lower end with antifriction bevel-rollers E E. (Referred to hereinafter.) The vertical rods D D, passing through the car-floor and guide-plate A, are provided at the lower end with antifriction-rollers E E, so that the reciprocation of the shoe F may be accompanied with as little friction as possible. On plate A rest two spiral springs, secured at the upper end by means of washers pinned to the vertical rods D D, around which they coil. These spiral springs are for the purpose of holding up the rollers E E until they are utilized in adjusting the switch I, as illustrated in Fig. 2. To the shoe F is connected the horizontal bar G, which is bedded into the curbing or foundation between the tracks and secured from any friction with the wood curbing by means of clamps H H, which are provided with holes for lubrication. The other extreme end of the horizontal bar G is drawn out round and turned up and hooked into a cavity provided for that purpose on the under side of the switch I.

The antifriction-rollers E E, previously referred to and shown throughout the several views, are beveled to suit the shoe F, so that the rollers E E may slip off the shoe F in case there be any obstruction about the switch I that would cause it to become blocked and impair any part of the device. The shoe F is a block of wood banded with iron sufficiently thick and strong enough to resist the shock of anything it may come in contact with. This band of iron is rounded off on the top edge to further resist obstruction, while at the lower edge it is made sharp, in order for it to clear the space for the shoe F to slip. The two parallel edges of the shoe F are to provide a straight run for the rollers E E to assure no rebounding of the switch I when adjusted.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in an automatic street-railway-switch appliance, of a stirrup or frame bolted to the bottom of the car-frame, two vertical rebounding pedal-rods held thereby, said rods provided with antifriction bevel-rollers, and a wedge-shaped block or shoe connected with the switch-tongue by means of a horizontal bar and adapted to be operated by said pedal-rods, all substantially as set forth.

JAMES POLK HOLEDGER.

Witnesses:
GILES W. CLARK,
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