

J. P. GORMAN.
RAIL CLEANER.
APPLICATION FILED FEB. 8, 1909.

944,132.

Patented Dec. 21, 1909.

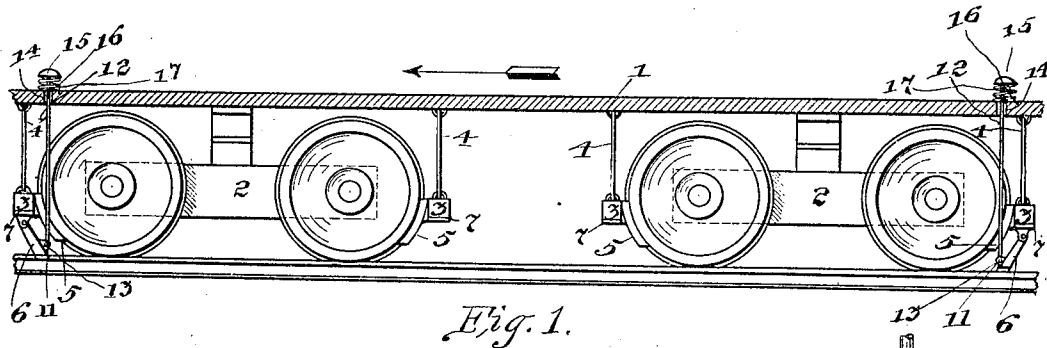


Fig. 1.

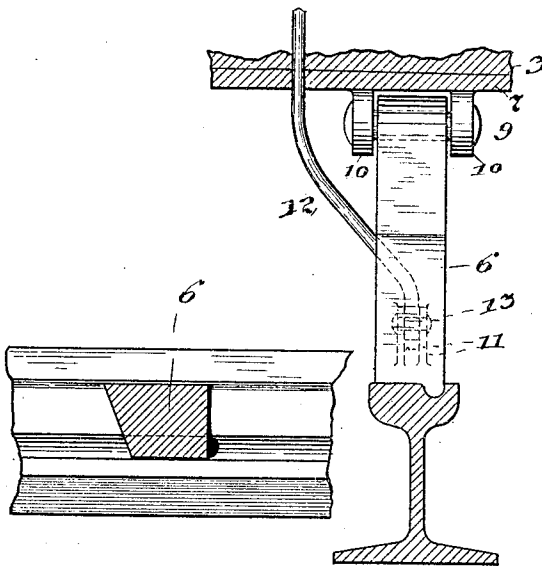


Fig. 2.

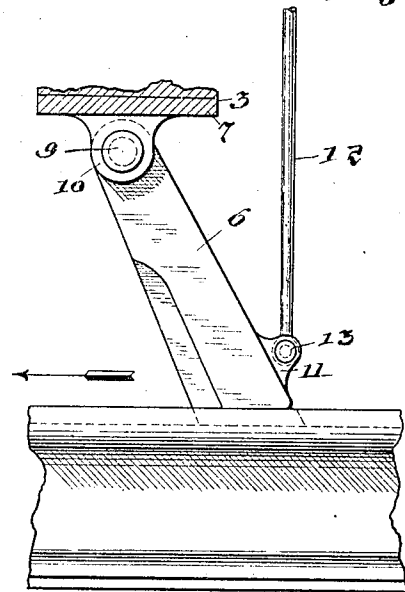


Fig. 3.

Witnesses:
H. St. Griffin
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UNITED STATES PATENT OFFICE.

JAMES P. GORMAN, OF CHICAGO, ILLINOIS.

RAIL-CLEANER.

944,132.

Specification of Letters Patent.

Patented Dec. 21, 1909.

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To all whom it may concern:

Be it known that I, JAMES P. GORMAN, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Rail-Cleaners, of which the following is a specification.

My invention relates to improvements in means for cleaning the rails of street railways and has for its object to provide a simple and inexpensive device of this character that will be efficient and reliable in use.

A further object of my invention is to provide a device having means incorporated therein for cleaning grooved rails. And a further object is to provide means whereby the rail cleaner may be thrown into or out of operation at will by the motorman from his position on the car platform.

Other objects will appear hereinafter.

With these objects in view my invention consists in such a novel construction and arrangement of parts all as will be hereinafter fully set forth and particularly pointed out in the appended claim.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a partial side elevation and longitudinal section of a portion of a street car embodying my invention in its preferred form. Fig. 2 is a detail elevation and a transverse section showing a rail and a portion of the car body. Fig. 3 is a detail side elevation, and Fig. 4 is a top elevation of a rail and a transverse section of the cleaning shoe.

Referring now to the drawings, 1 indicates the car body and 2 the trucks thereof. The brake supporting frames 3 may be suspended from links 4 or they may be incorporated as a part of the truck frame as is usual in street car practice, and the brake shoes 5 may be secured in any suitable manner. The cleaning shoe 6 is preferably pivoted to the brake bar 7 or to any suitable portion of the truck frame adjacent the car wheels, and said shoe is preferably inclined to the rail on which it is adapted to bear.

The cleaning shoe pivotal bolt 9 is secured in the lugs 10 depending from the brake bar 7, and the cleaning shoe 6 is free to swing on said bolt. In order to present a large rail contacting surface the cleaning shoe is preferably tapered, the narrow portion of which taper being at the pivoted end of the shoe. Perforated lugs 11 are provided in the cleaner shoe 6 adjacent its lower end, and an operating rod 12 is pivoted to said lugs by means of the bolt 13. The operating rod 12 is bent sufficiently to clear the car wheels and extends upwardly through a perforation 14 in the car floor, and is provided with a head or pedal 15. Interposed between the head 15 and the car floor 16 is a helical spring 17 which surrounds the rod 12. This spring is adapted to maintain the rod 12 and the cleaning shoe 6 in the normal elevated or inoperative position. The lower end of the cleaning shoe 6 is shaped to conform to the tread and groove of the rail, so that when the pedal 15 is depressed by the motorman the cleaning shoe contacts with the rail and rail groove and cleans the same. To enhance the cleaning action the front and lower side of the cleaning shoe 6 is beveled in order to deflect the dirt between the rails.

Two or more cleaning shoes are provided on a side of a car, as shown in Fig. 1, and the shoe which is inclined toward the direction of movement of the car is in front, in order that the motorman may operate it conveniently. It is seen, because of the inclination of the shoe, that it is impossible for the same to catch into rail-frogs or other obstructions, and that any required pressure of the shoe against the rail may be given by the motorman.

While I have shown what I deem to be the preferable form of my invention, I do not wish to be limited thereto, as there might be many changes made in the details of construction and arrangement of parts without departing from the spirit of my invention.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

In a rail and a rail-groove cleaner, a car

having a rail cleaning shoe pivoted to the
brake bar thereof, said shoe being inclined
to the rail on which it is adapted to bear and
means for normally maintaining said arm
5 out of engagement with said rail, substan-
tially as and for the purposes specified.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

JAMES P. GORMAN.

Witnesses:

JOSHUA R. H. POTTS,
HELEN F. LILLIS.