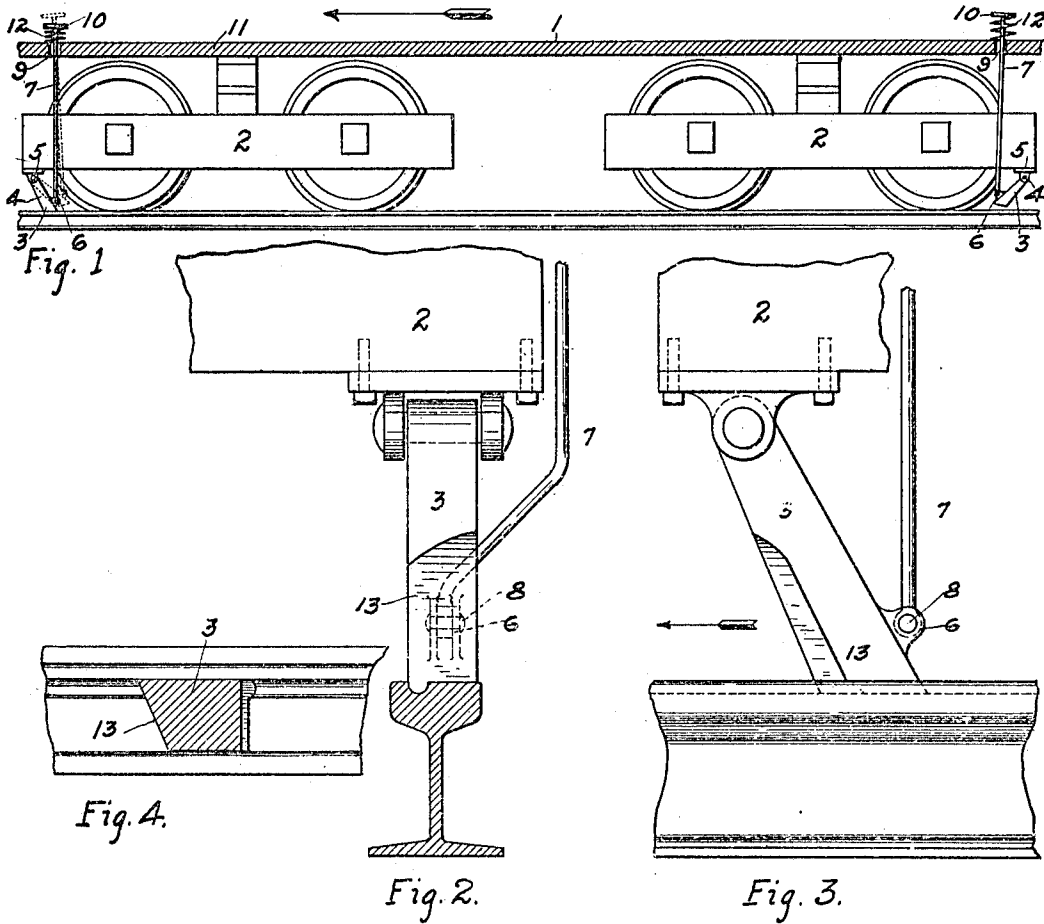


J. P. GORMAN.
RAIL CLEANER.
APPLICATION FILED JUNE 1, 1909.

954,278.

Patented Apr. 5, 1910.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES P. GORMAN, OF CHICAGO, ILLINOIS.

RAIL-CLEANER.

954,278.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed June 1, 1909. Serial No. 499,351.

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 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.

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 cleaning shoe 3 is preferably pivoted to the truck 2 adjacent to the car wheels, and said shoe is inclined to the rail on which it is adapted to bear as shown. The cleaning shoe pivotal bolt 4 is secured in the lugs 5 depending from the bottom of the truck 2 and the cleaning shoe 3 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 or bent end there-

of. The perforated lugs 6 are provided on the cleaning shoe adjacent to its lower end and an operating rod 7 is pivoted to said lugs by means of the bolt 8. The operating rod 7 is bent sufficiently to clear the car truck and extends upwardly through a perforation 9 in the car floor, and is provided with a head or pedal 10. Interposed between the head 10 and the car floor 11 is a helical spring 12 which surrounds the rod 7. This spring is adapted to maintain the rod 7 and the cleaning shoe 3 in the normal elevated or inoperative position. The lower end of the cleaning shoe 3 is shaped to conform to the tread and groove of the rail so that when the pedal 10 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 is beveled as at 13 in order to deflect the dirt from the rails.

Two or more cleaning shoes are provided on each side of a car as shown in Fig. 1, and the shoe sloped rearwardly toward the rail is in front in order that the motorman can operate it conveniently. It is seen that because of the rearward slope of the shoe 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 cleaner, grooved rails, a car and car truck, a rail cleaning shoe pivoted to said truck vertically over a rail, said shoe being inclined to the rail on which it is adapted to bear, two lugs integral with said shoe on the upper inclined surface thereof, a bent operating rod pivoted to said lugs and extending upwardly through a perforation provided in the car floor, a head or pedal at the upper extremity of said operat-

ing rod, and a helical spring surrounding said rod interposed between said head and said car floor, said spring being adapted to normally maintain said cleaning shoe out of engagement with said rail, substantially 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.