

(No Model.)

F. S. WARDWELL.
ATTACHMENT FOR STREET RAIL BROOMS.

No. 467,213.

Patented Jan. 19, 1892.

Fig. 1.

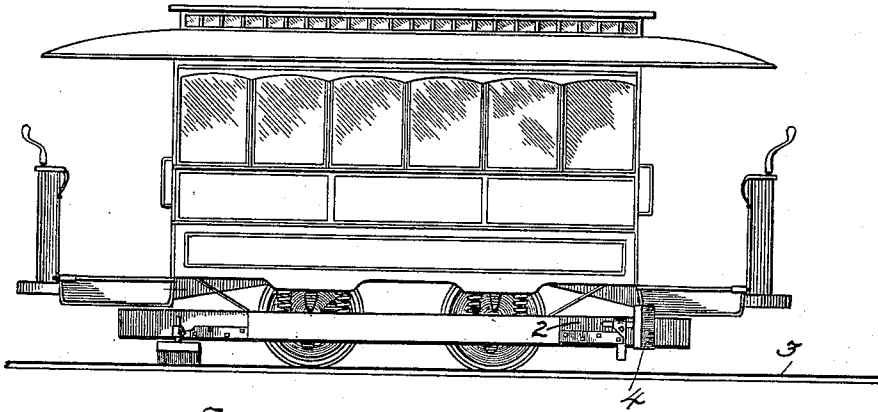


Fig. 2.

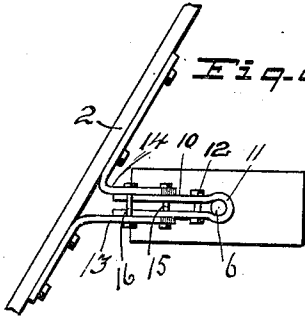


Fig. 3.

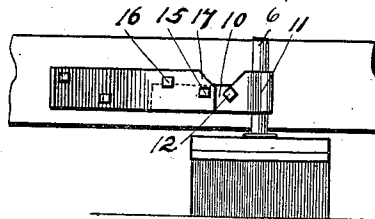


Fig. 4.

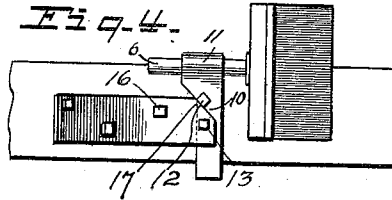
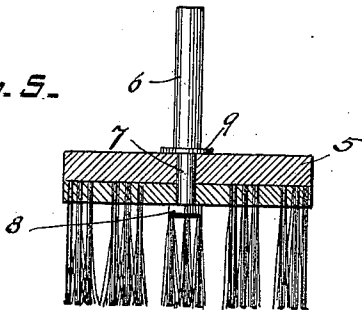


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

FRED SCHUYLER WARDWELL, OF DULUTH, ASSIGNOR OF ONE-HALF TO
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ATTACHMENT FOR STREET-RAIL BROOMS.

SPECIFICATION forming part of Letters Patent No. 467,213, dated January 19, 1892.

Application filed May 18, 1891. Serial No. 393,081. (No model.)

To all whom it may concern:

Be it known that I, FRED SCHUYLER WARDWELL, of Duluth, in the county of St. Louis and State of Minnesota, have invented certain Improvements in Attachments for Street-Rail Brooms, of which the following is a specification.

My invention relates to brushes or brooms adapted to sweep the street-rails, and especially to means for attaching the same to the car.

The object of the invention is to provide cheap and durable means for the attachment of the brush whereby the same is made readily movable to and from contact with the rail and also made adjustable with respect to the same.

To this end my invention consists in the combination, with the rail-broom, of a hinge connection whereby the same is pivotally attached to the lower part of the car or its truck, said hinge being adapted to operate longitudinally with respect to the track, as hereinafter set forth and claimed.

The invention consists, further, in means whereby vertical adjustment of the brush or broom is made possible and in various details of construction and combination, hereinafter described, and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of a street-car provided with brooms embodying my invention. Fig. 2 is an enlarged view showing the broom and the attachments. Fig. 3 is a side elevation of the same. Fig. 4 is a similar view showing the brush raised from the rail. Fig. 5 is a detail showing the broom and the stem or stud thereof.

As shown in the drawings, the brooms are ordinarily arranged in connection with the guard or fender 2 and immediately above the street-rails 3. Each broom 4 has a solid back 5 and is provided with a stem or stud 6, the lower end 7 of which is reduced in size and secured in the back 5 by a nut 8, provided on

the threaded end thereof, the washer 9 having first been placed over the end 7 to give a firm bearing for the shoulder between the two parts of the stud. The stem or stud 6 is firmly clamped in the doubled strap 10, having the eye or sleeve 11. The two ends of the strap are drawn together by the bolt and nut 12, whereby after being properly adjusted in the sleeve 11 the stem is firmly held therein. Angle pieces or brackets 13 and 14 extend from the fender 2, the same being of such form as to make the outer ends of the bracket parallel with the street-rail. When the fender has a V shape, the feet of the brackets are provided at the angles shown. A bolt 15 extends through the ends of the brackets 13 and 14 and through the strap 10, thereby pivoting the same and the broom upon the end of the bracket. A bolt 16 is provided as a stop for the inner ends of the strap 10. The upper corners 17 of the brackets are beveled off, as shown, and the head of the bolt 12 is so arranged as to engage the same when the brush is thrown up and back. Any suitable means may be provided for raising and holding the brush in place; or the pivot-points may be so arranged that the center of gravity of the brush and its attachment will fall back of the bolt 15.

The brushes are arranged to move vertically in a plane parallel or coincident with that of the rail beneath the same, and in use the forward brushes are thrown down upon the rail while the rear ones are raised. It will be seen that any obstruction on the rail tends to force the brush down more firmly against the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, in a device of the class described, of the brush or broom with a stem 6 therefor, a strap having an eye adapted to engage the same, and brackets 13 and 14, with which said strap is pivotally connected, substantially as described.

2. The combination, in a device of the class described, of a brush or broom having a stem

or stud 6, with the strap 10, provided with the eye portion 11, adapted to engage said stud, a bolt and nut 12 for tightening the same, the brackets 13 and 14, adapted to be secured on
5 the car, and the bolts 15 and 16, substantially as and for the purpose specified.

3. The combination, with the brush 4, having the stem 6, with the eye-strap 10, having its ends secured by a bolt 12, brackets 13 and
10 14, having beveled ends 17, and the bolts 15

and 16, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 9th day of May, 1891.

FRED SCHUYLER WARDWELL.

In presence of—

MELVIN J. KINCH,

A. G. CABLE,

PERCY WALWYN.