(No Model.)

J. E. McBRIDE.

FENDER FOR CARS.

No. 532,086. Patented Jan. 8, 1895.

Fig. 3.

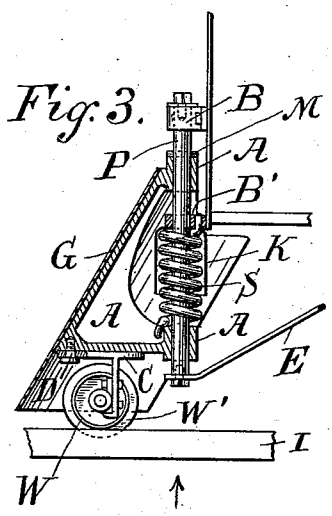


Fig. 1.

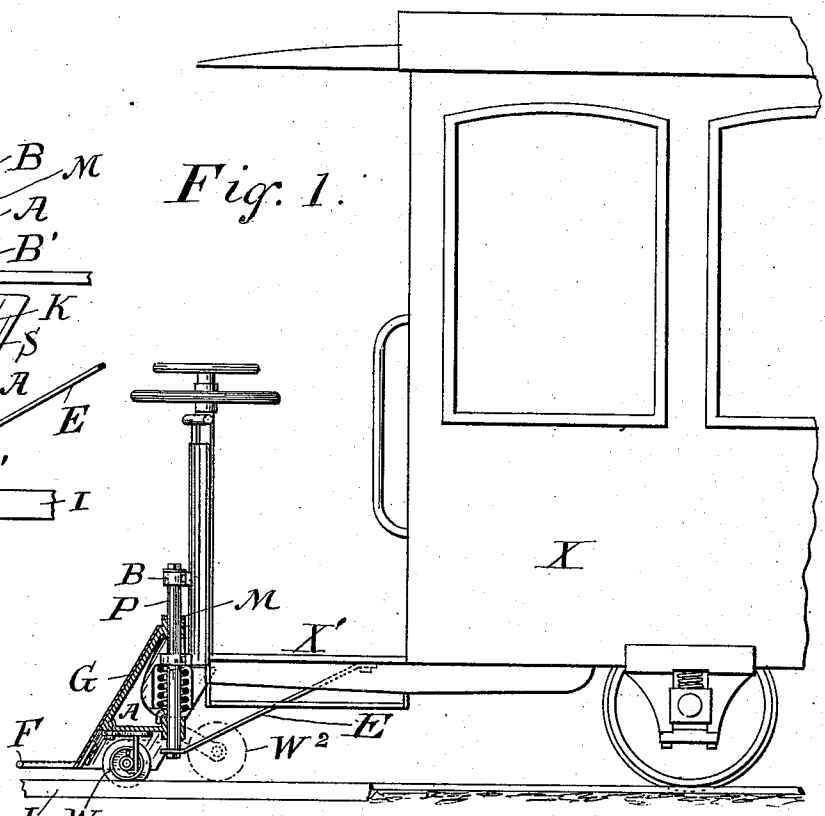


Fig. 4.

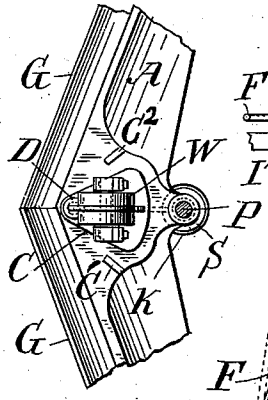


Fig. 2.

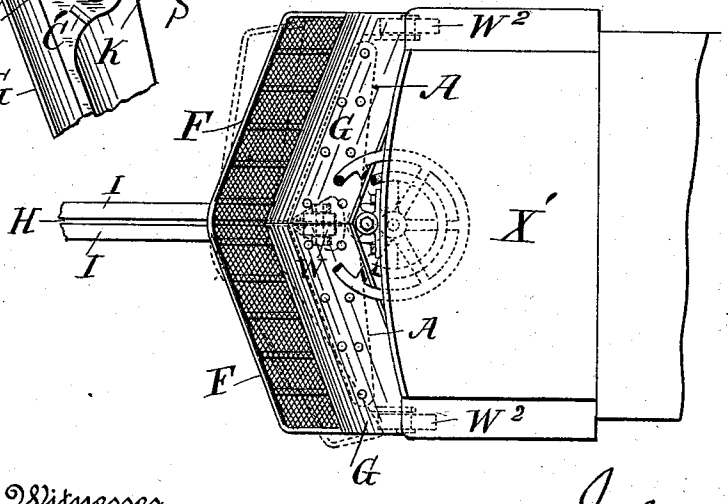
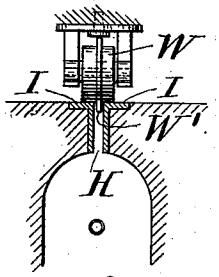


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN E. McBRIDE, OF NEW YORK, N. Y.

FENDER FOR CARS.

SPECIFICATION forming part of Letters Patent No. 532,086, dated January 8, 1895.

Application filed February 20, 1894. Serial No. 500,855. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. McBRIDE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Fenders for Railway-Cars, of which the following is a specification.

This invention relates to a fender for street cars, which is intended to prevent persons and animals that may be in the path of movement of the car, from being run over and injured thereby.

The objects of the invention are to provide the car with a fender, which will retain substantially the same vertical position with relation to the track regardless of the vertical movements or tiltings of the car, and which will follow the direction of and cover the track at all times, and especially as the car is rounding curves. These objects are attained by the construction and arrangements hereinafter described and claimed.

Referring to the accompanying drawings, Figure 1 represents, in side elevation, a portion of a street-railway car with the fender attached thereto, and shown in vertical section. Fig. 2 represents a top view of the same. Fig. 3 shows on a larger scale, the fender and the means by which it is mounted upon the car platform, the horizontal netting being removed. Fig. 4 represents an under view of the same. Fig. 5 shows in vertical section a portion of the roadway and the center rails of a cable-road, with one of the forms of guide roller, which is attached to the fender, in engagement with said rails.

X represents the car upon the platform X′ of which the fender is mounted. This fender as shown, is of angular form in plan, as shown in Fig. 2, and has a suitable framework A, upon which is secured a downwardly and forwardly inclined covering G, of metal or other suitable material, to the base of which may be attached a horizontal netted frame F, which occupies a position slightly raised above the track and road-bed.

For attaching the fender to the platform, the latter is provided with a vertical rod P, which is secured to the platform in any suitable manner, as by an upper stay or bracket, B, and a lower one E. Upon this rod the fender is journaled or mounted so that it can move vertically and swing laterally.

In order to prevent any shock that might arise from a sudden contact of the bracket B, with the upper journal of the frame A, when the end of the car tilts downward, a washer M, of elastic material may be mounted on said journal between it and the bracket B, as shown in Figs. 1 and 3.

Although the weight of the fender may be made sufficient to keep it in the desired vertical relation to the rails and road-bed, yet I prefer to employ a coiled spring S, to assist in this particular, which spring surrounds the rod, P, and has a bearing at its upper end upon a stationary bracket or sleeve B′, attached to the dash-board of the platform, or to the rod P, and at its lower end upon a part of the fender frame, as shown in Figs. 1 and 3. This spring may be incased, if desired, in a cup-shaped sleeve K, attached to the bracket B′, as shown in Fig. 3.

For retaining the fender in line with the track, rail-engaging means are employed, which preferably consist of one or more wheels or rollers. When applied to a cable-car, a wheel or roller W, having a peripherical flange W′, adapted to enter the slot H, between the rails I I, Fig. 5, may be attached to the fender-frame, as by a bracket C, which is preferably pivoted at its forward end at D, to the frame A, the said wheel acting as a guide to the fender. The frame A is also preferably provided on its under side with lugs C′, C², to limit the swinging movement of the bracket C, as shown in Fig. 4.

When attached to an ordinary or electric car, the fender is intended to be furnished with two wheels, W², shown by dotted lines in Figs. 1 and 2, each engaging the running rails, respectively, of the track; and the wheels W², may be used in addition to the wheel W on a cable road, if desired.

From the foregoing, it will be understood that the rail-engaging means, or guide wheel or wheels, will cause the fender to follow the direction of the track and to overlie both running rails at all times, the fender turning upon the rod P, when the car rounds curves; and that said rod will play or move in the frame A, of the fender as the car tilts upward

or downward, and the vertical relation of the fender to the track will not be disturbed by suh tilting.

The car may, and is intended to, be furnished with a fender at each end.

In the practical application of my invention I do not wish to be confined to the particular shape of the fender, nor to the exact location shown, as it may be attached with more or less outward projection, without departing from the spirit of the invention.

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

1. The combination with a car-platform, of a stationary vertical rod secured thereto; a fender mounted on said rod and capable of a bodily-vertical movement and a laterally-swinging movement on said rod; and a rail-engaging guide-wheel or wheels mounted on the fender to guide the same, substantially as set forth.

2. The combination with a car-platform, of a stationary vertical rod secured thereto; a fender mounted on said rod and capable of a bodily-vertical movement and a laterally-swinging movement on said rod; a spring for pressing the fender toward the road-bed; and a rail-engaging wheel or wheels mounted on the fender to guide the same, substantially as set forth.

3. The combination with a car, of a fender mounted thereon and having vertical and laterally swinging movements with relation thereto, and furnished with a centrally located rail engaging wheel having a peripherical flange, and pivoted to the fender, substantially as set forth.

JOHN E. McBRIDE.

Witnesses:
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