

(No Model.)

G. B. RIGGINS.
CAR FENDER.

No. 542,778.

Patented July 16, 1895.

Fig 1

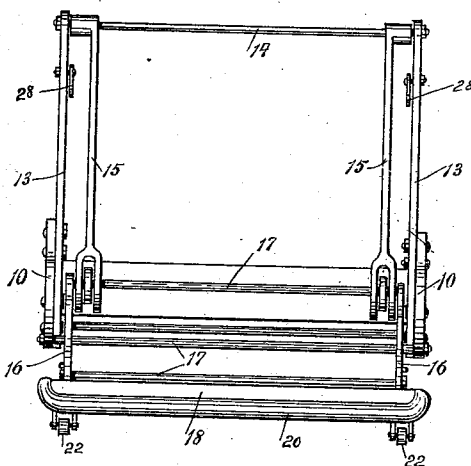


Fig 2

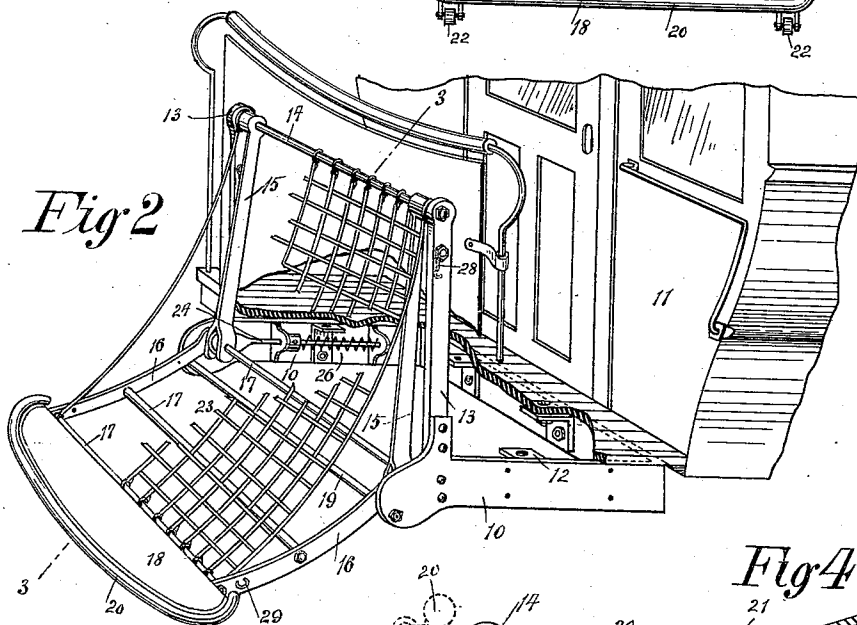


Fig 4

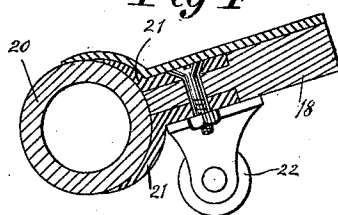


Fig 5

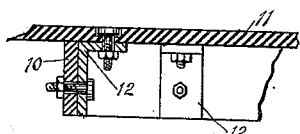
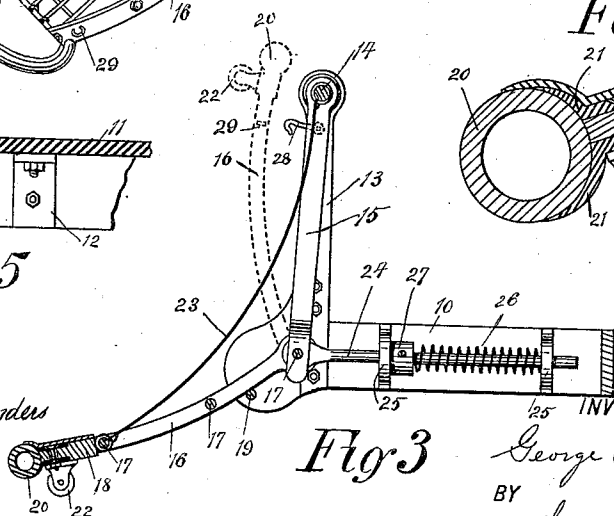


Fig 3



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GEORGE BOSS RIGGINS, OF BROOKLYN, NEW YORK.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 542,778, dated July 16, 1895.

Application filed May 24, 1895. Serial No. 550,495. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BOSS RIGGINS, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Car-Fenders, of which the following is a full and exact description.

My invention relates to improvements in car-fenders such as are attached to the ends of cars, and particularly street-cars, to prevent people from being run over or injured.

The object of my invention is to produce a very cheap and efficient fender, which can be conveniently attached to any ordinary street-car, which is constructed in such a way that it may be dropped into close contact with the street or raised against the dashboard, thus adapting it for use and enabling it to be readily placed out of the way when not in use; also, to produce a fender which if it strikes a person on the track will trip and catch him without injuring him, and, further, to produce a fender which is not likely to get out of repair, and which can be operated by a person of little intelligence.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures refer to corresponding parts throughout the several views.

Figure 1 is a front elevation of my improved fender with the netting removed. Fig. 2 is a broken perspective view of the fender as applied to a car. Fig. 3 is a vertical section on the line 3 3 of Fig. 2. Fig. 4 is an enlarged detail view of the front edge of the fender, and Fig. 5 is a detail sectional view showing a means of fastening the fender-supporting frame to the car bottom.

In carrying out my invention the frame 10 is preferably used, this comprising opposite side pieces connected at the back and the side pieces projecting slightly from the end of the car, the frame and side pieces being secured to the car-bottom by means of angle-brackets 12 or other suitable fastening.

The projecting end portions of the frame 10 support posts 13, which are rigidly fastened to the frame and extend upward opposite the

dashboard of the car, as shown clearly in Fig. 2. These posts are connected at the top by a rod 14, which serves to stiffen the posts and also serves as a support for the hanger-arms 15 of the fender and the netting, which will be hereinafter described.

The arms 15 are pivoted on the rod 14 and are arranged near the opposite ends of the rod, the arms having pivoted to their lower ends the side bars 16 of the frame, which side bars are connected by stiffening cross-rods 17 and by a front edge plate 18; and the side bars 16 are preferably curved slightly, so that the fender will extend forward at an easy angle so as to readily catch a person tripped by the fender, and the fender-frame is prevented from dropping too low by a cross-rod 19 on the front end of the frame 10.

The edge plate 18 has at its front edge a hollow cushion 20, preferably of rubber, which is adapted to first strike a person in front of the car, and the cushion will trip without injuring the person whom it strikes, and the tripped individual will then be caught on the netting to be presently described.

The cushion 20 may be fastened in any convenient way, but is preferably held between the projecting flanges of the angle-irons 21, (see Fig. 4,) which are bolted to the upper and lower sides of the plate 18, the flanges of the angle-irons being shaped to fit the cushion, as the drawings clearly show. The upper of these angle-irons 21 is preferably covered with a sheet of rubber or other protecting material, which also covers the top of the plate 18.

The fender-frame has on opposite sides and near the front edge trucks or rollers 22, which as the car rocks are adapted to strike the rod and cause the fender to pass easily over any obstruction, and they also prevent the frame from sagging in case a person is caught by the fender.

The fender is provided with a netting 23, which extends from the front cross-rod 17 to the rod 14, as shown clearly in Fig. 2; and this netting is not stretched tight, but is sufficiently slack to enable it to easily catch and hold a person tripped by the fender, and as the netting is made of pliable material the person whom it catches is uninjured.

The rear ends of the fender side pieces 16

are pivoted to the buffer-rods 24, which slide in brackets 25 on the frame 10, and the buffer-rods are backed by springs 26, which are coiled around the rods and are arranged between the brackets 25 and collars 27 on the rods.

It will be seen that when the fender strikes a person the cushion 20 will absorb part of the shock and the fender-frame will be raised slightly, after which the buffer-rods will be pushed back against the springs 26, which absorb the rest of the shock, and so the person tripped is easily caught by the fender and the fender is relieved of excessive strain.

The fender-frame may be tipped up into the position shown by dotted lines in Fig. 3 when the fender is not in use—as, for instance, when it is on the rear end of the car—the fender-frame being fastened in this position by means of hooks 28 on the posts 13 and eyes 29 on the side pieces 16 of the fender-frame; but any other suitable fastening may be used.

I have shown no means for raising the fender-frame, but it will be understood that a chain or cord may be attached at any convenient point on the fender-frame and extended up over the dashboard, so that the driver or motorman may lift the frame when necessary.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the car, of a pair of arms pivotally suspended in front of the dash-board of the car, a fender frame pivoted to the lower ends of the arms and projecting forwardly therefrom, the said frame comprising side pieces, cross braces and a cushioned front edge plate, a netting extending from

the front part of the fender frame to a support near the tops of the posts, and spring buffer rods mounted beneath the car and pivoted to the rear part of the fender frame, substantially as described.

2. The combination with the car, of the supporting frame secured to the car bottom and projecting forward therefrom, posts secured to the frame and extending upward in front of the dash-board, a cross rod connecting the posts, a pair of arms suspended on the cross rod near opposite ends thereof, a forwardly extending fender frame, pivoted to the lower ends of the arms and provided with a cushion at its front edge, a netting extending from the front part of the fender frame to the cross rods at the top of the posts, and sliding spring pressed buffer rods mounted behind the fender frame and pivotally connected therewith, substantially as described.

3. The combination with the car, of the supporting frame secured to the car bottom and extending forwardly therefrom, upwardly extending posts carried by the supporting frame, a cross rod connecting the posts, a single pair of arms suspended from the cross rod near opposite ends thereof, a forwardly projecting fender frame pivoted to the arms and provided at its front edge with a cushion and on the under side with trucks, and sliding spring pressed buffer rods, mounted on the supporting frame behind the fender frame, and pivotally connected with the fender arms, substantially as described.

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Witnesses:

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