(No Model.)

T. ROSS.

CAR FENDER.

No. 525,516. Patented Sept. 4, 1894.

Fig. 1.

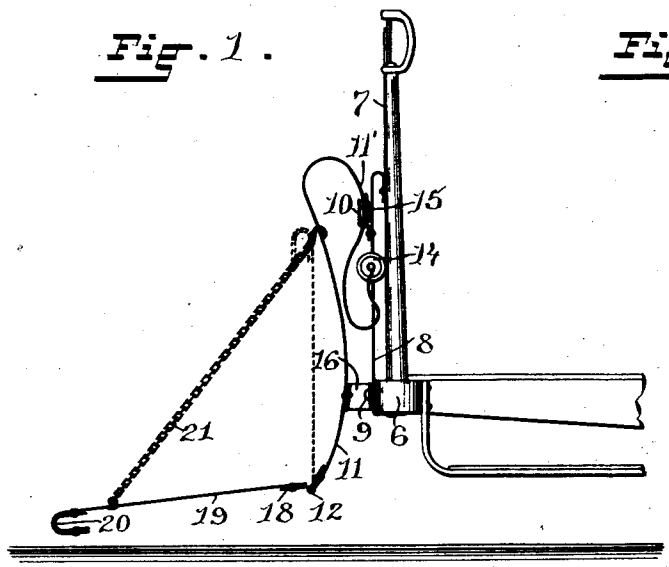


Fig. 3.

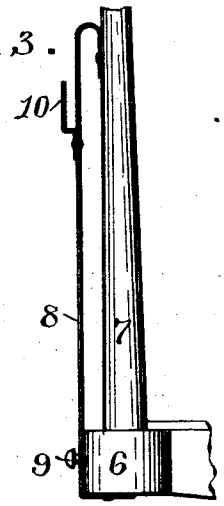


Fig. 2.

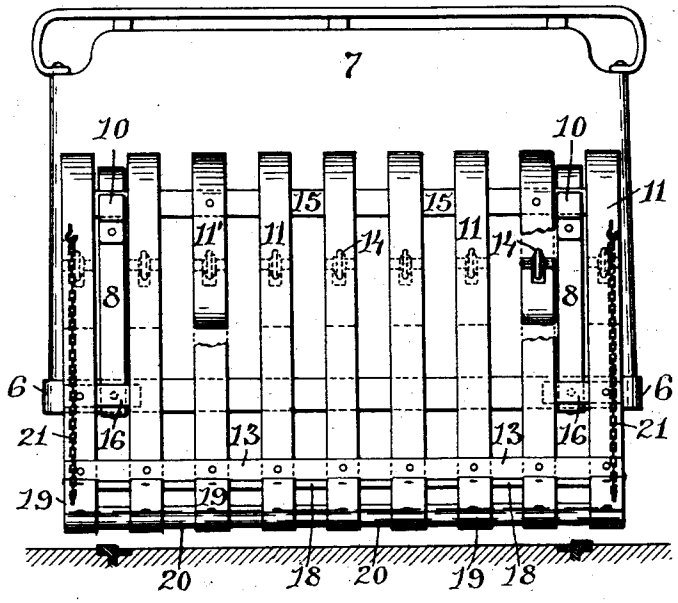


Fig. 4.

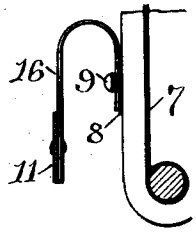
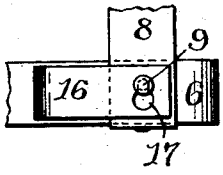


Fig. 5.



WITNESSES:

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Attys

UNITED STATES PATENT OFFICE.

THOMAS ROSS, OF WESTERLY, RHODE ISLAND.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 525,516, dated September 4, 1894.

Application filed March 8, 1894. Serial No. 502,807. (No model.)

To all whom it may concern:

Be it known that I, THOMAS ROSS, of Westerly, in the county of Washington and State of Rhode Island, have invented certain new and useful Improvements in Car-Fenders; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in devices adapted to be carried on the end of a car and to prevent a person being thrown beneath the car.

One object of the invention is to so construct a car-fender that, when desirable, it may readily be removed from the car.

Another object of the invention is to so construct the car-fender that a person falling thereon will not be injured.

Still another object is to reduce the weight of the fender and to produce a flexible device of this nature which will always be in a position for immediate operation.

The invention consists in the peculiar construction of the upright member and the combination therewith of the novel pilot member, as will hereinafter be more fully described and pointed out in the claims.

Figure 1 represents a side view of a portion of a car with the improved fender attached. Fig. 2 represents a front view of the same. Fig. 3 represents a side view of the same, the fender being removed, showing the attaching device therefor. Fig. 4 represents a plan view of portions thereof, partially in section, showing one of the side buffers and means for attaching the same to the car. Fig. 5 is a front view thereof partially in section.

Similar numbers of reference designate corresponding parts throughout.

In the drawings 6 represents the front cross beam of a car platform and 7 is the dasher secured to the platform,—to the beam 6 are secured the lower portions of the rods 8—8 the upper ends of which are bent over and secured to the upper part of the dasher, from the lower portions of these rods 8—8 extend the headed studs 9—9 and to the upper portions are secured the upwardly-extending hooks 10—10. The upright or dasher member of the fender is formed by a series of vertically-disposed strips 11—11 of spring metal, usually steel, these are bent over a rod 12 at their lower ends and are further secured by the cross-strip 13, they extend upward curving first inward and then outward, at their upper ends they curve toward the car dasher and then extend downward in elongated S-shaped curves, their ends being turned upward and each being provided with a roller-bearing 14 which bears against the dasher 7,—at the downwardly curving portion 11′ these spring strips are secured together by the cross-strip 15 which may be engaged with the hooks 10—10 and serve to sustain the fender in position. To the outer strips 11, at the level of the beam 6, are secured the laterally-extending bent spring-buffers 16—16 having the perforations 17—17 in their free ends which slightly exceed the diameter of the heads of the studs 9—9, and slots extending upwardly from these perforations into which the shanks of the studs may engage to securely hold the buffers to the car. To the rod 12 between the strips 11—11 are pivotally secured the cross-strips 18 to which are fastened the inner ends of the spring-metal strips 19—19 the outer ends of which are turned over the bar 20 which has a U-shaped cross-section,—to the outer bars 19—19 are secured the chains 21—21 the upper ends of which are fastened to the outer bars 11—11 and serve to support the pilot portion of the fender in a position so that its forward end will just clear any usual obstruction, when not in use the pilot portion may be folded upward and sustained by any ordinary securing device.

This fender is light and durable while its spring construction is such as to prevent injury to a person falling thereon as the spring-strips give with any undue weight, the roller-bearings 14 allowing free play to the strips 11 and the bends in front of these bearings serving as double buffers, also the fender may be readily removed from the car by disengaging the cross-strip 15 from the hooks 10—10 and the buffers 16—16 from the studs 9—9.

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

1. The combination with a car-dasher, of a fender composed of an upright member and a pilot member pivotally secured together, each being formed of strips of spring metal,

the strips of the upright member curving over at the top and being furnished with roller-bearings at their ends.

2. The combination with the dasher 7, the beam 6 and the bars 8—8 secured thereto and provided with the headed studs 9 and hooks 10, of the upright member formed of the strips 11—11 secured together by the rod 12 and the cross-strips 13 and 15 and provided on the ends with the roller-bearings 14, the lateral spring-buffers 16 secured to this member, and the pilot member pivotally secured to the rod 12 and formed of the strips 19—19 secured together by the cross-strip 18 and by the U-shaped bar 20, and the chains 21—21 secured to the pilot member and to the upright member, as described.

In witness whereof I have hereunto set my hand.

THOMAS ROSS.

Witnesses:
STEPHEN PERCY, Jr.,
JOSEPH A. MILLER, Jr.