

(No Model.)

H. A. WEBSTER.
CAR FENDER.

No. 572,389.

Patented Dec. 1, 1896.

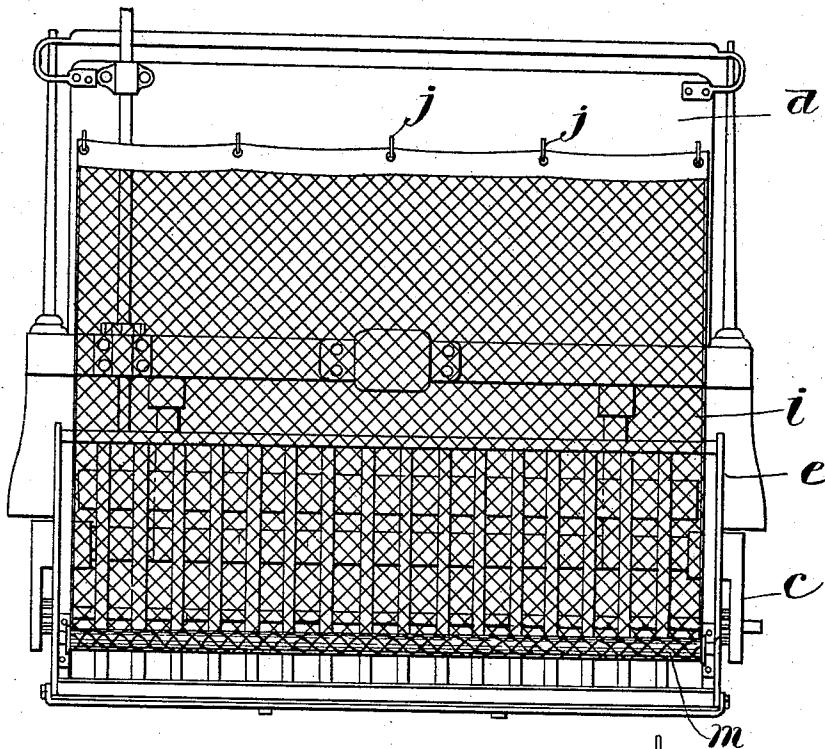


FIG. 1.

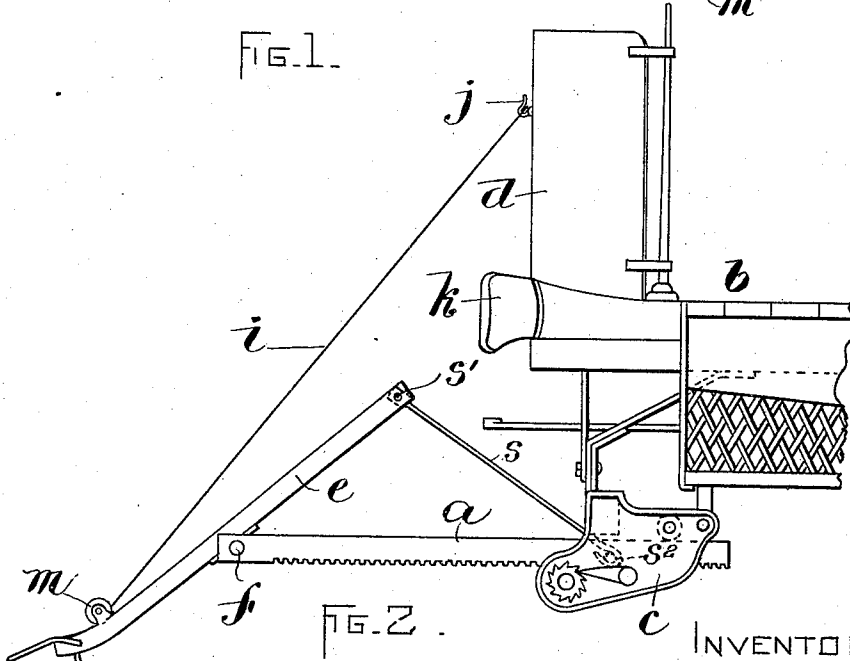


FIG. 2.

WITNESSES:
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UNITED STATES PATENT OFFICE.

HAROLD A. WEBSTER, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR TO
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CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 572,389, dated December 1, 1896.

Application filed July 30, 1896. Serial No. 601,056. (No model.)

To all whom it may concern:

Be it known that I, HAROLD A. WEBSTER, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to car-fenders of the character shown in Letters Patent of the United States No. 562,942, dated June 30, 1896; and it has for its object to provide, in addition to the fender shown in that patent, a supplemental flexible fender which is normally held by the hinged or pivoted fender shown in said patent in a tense condition and in position to act as a buffer to break the force with which a person caught by the fender is projected backwardly against the front portion of the car, so that injurious contact between the person and the dasher and other rigid projections on the car may be avoided.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a front elevation of a portion of a street-car provided with a fender embodying my improvement. Fig. 2 represents a side elevation of the parts shown in Fig. 1.

The same letters and numerals of reference indicate the same parts in both the figures.

In the drawings, *a* represents a substantially horizontal frame or support which is located below and projects forward from the platform *b* of a car, said support being adapted to slide in guides *c*, affixed to the platform, to enable the fender to be retracted under the platform when not required for use. When the support *a* is in position for use, its forward end projects considerably in advance of the platform and of the dasher *d*, said support being preferably elevated a foot, or thereabout, above the track.

e represents the fender, which is composed of a frame suitably constructed to support a human body falling against it. The fender is here shown as composed of bars or strips combined to form a reticulated support, the openings in which are sufficiently small to prevent a person from falling through them. I prefer to curve or deflect the forward end

of the fender from the plane in which its main portion stands to the end that the lower portion of the frame may act as a scoop to take from the ground a prostrate body which may be encountered by the fender. The fender is provided at its forward end with a series of downwardly and rearwardly projecting elastic feet *f*, which are arranged to strike the track or road-bed and serve as runners or buffers to prevent the forward portion of the fender from striking and being engaged by projections on the pavement when the forward portion of the fender is depressed by the weight thrown upon it or by the oscillating movements of the car.

The fender is pivotally connected with the support *a* by means of a rod *g*, extending across the support and through sockets arranged at or near the center of the length of the fender, the arrangement being such that the forward end of the fender having the described elastic extension is in advance of the pivot or rod *g*, while the opposite end is at the rear of said pivot. The fender normally stands in the inclined position shown, its forward end, which overbalances the rear end, being in close proximity to the track and its opposite end being considerably raised.

The construction above described is substantially identical with that set forth in the patent above mentioned. In carrying out my invention I provide a flexible supplemental fender *h*, which is preferably a sheet of stout netting, although it may be of canvas, leather, or other suitably strong and flexible material. For convenience of description I will hereinafter allude to the pivoted fender *e* as the "primary" fender. The supplemental fender is attached at its upper end to the dasher of the car at a point considerably higher than the upper end of the primary fender, the connection between the supplemental fender and the dasher being preferably by means of hooks *j* on the dasher and eyes formed in the upper edge of the supplemental fender. The lower end of the supplemental fender is attached to the forward portion of the primary fender at a point considerably in advance of the rod or pivot *g*. The supplemental fender is arranged so that when the primary fender is in its normal po-

sition, as shown in Fig. 2, the supplemental fender will be held yieldingly in a tense condition by the weight of the primary fender, and will extend in an inclined position from the lower portion of the primary fender to the dasher of the car sufficiently in advance of the dasher and of the usual projections on the car, such as the draw-head *k*, to prevent a person caught by the fender from being thrown violently against such fixed parts. The supplemental fender therefore constitutes a yielding buffer which breaks the force of the blow caused by the landing of a person on the fender. The flexibility of the supplemental fender enables it to be folded upon the primary fender and moved back with the latter under the car.

The lower end of the supplemental fender may be attached either directly to the primary fender or to a roller *m*, journaled thereon, as shown in Figs. 1 and 2, the object of the roller being to enable the fender to be rolled up in compact form. I do not limit myself, however, to the roller and may dispense with the same, attaching the supplemental fender directly to the primary fender.

It will be seen that the supplemental fender may be used as a stop to limit the downward-swinging movement of the front end of the primary fender, it being in this respect an equivalent of the rod *s*, which is shown in

the patent above mentioned and in the drawings of this application, said rod being pivoted at *s'* to the rear end of the primary fender and having a hook or open slot to engage a fixed stud or pin. It is obvious that the supplemental fender enables the rod *s* to be dispensed with, if desired.

I claim—

The combination of a frame or support projecting forward from the car-platform, a primary fender pivotally connected between its ends to said support, with its center of gravity forward of its pivoted point, and adapted to swing from an inclined position with its forward end in close proximity to the track, to a horizontal position with its forward end elevated, and a flexible supplemental fender affixed at one end to the dasher of the car above the primary holder and at its lower end to the primary fender below its center of motion, said supplemental fender being held yieldingly in a tense condition by the primary fender.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 24th day of July, A. D. 1895.

HAROLD A. WEBSTER.

Witnesses:

A. D. HARRISON,
P. W. PEZZETTI.