

(No Model.)

G. H. MODEMANN.
FENDER FOR STREET RAILWAY CARS.

No. 535,388.

Patented Mar. 12, 1895.

Fig. 1.

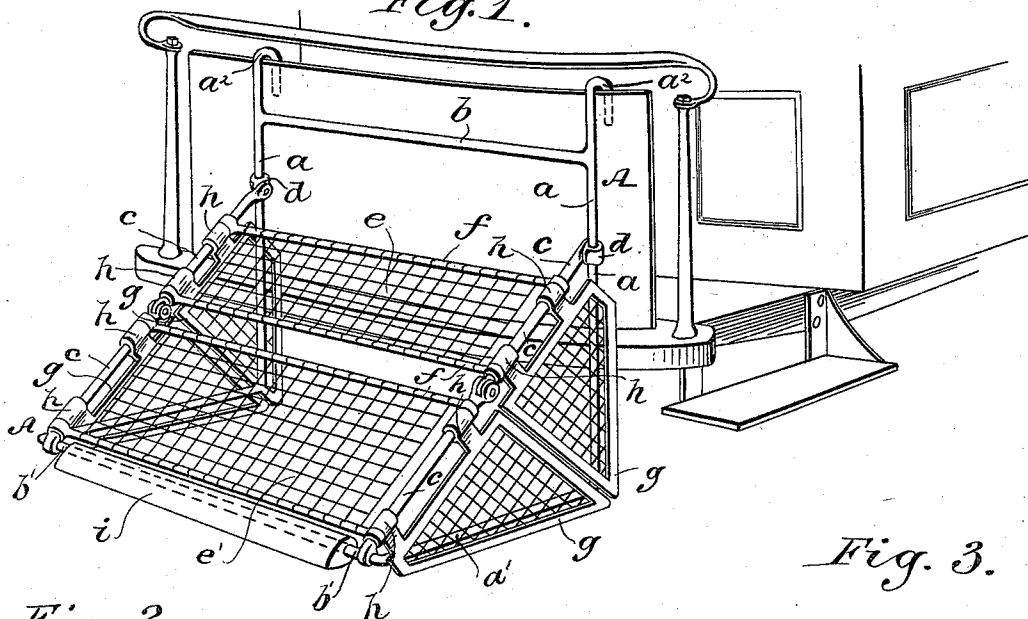


Fig. 2.

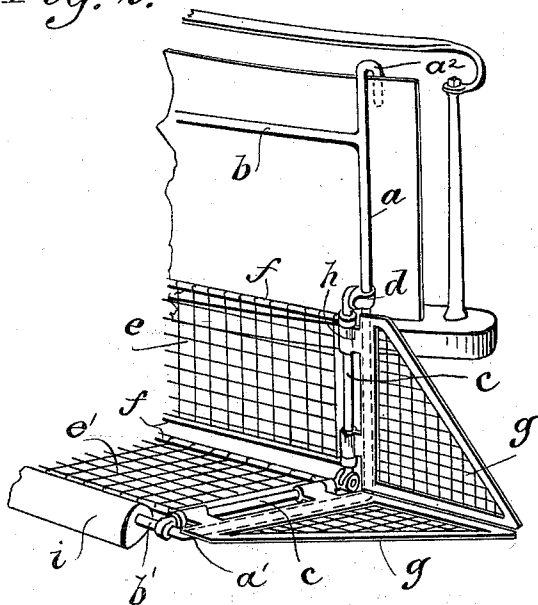
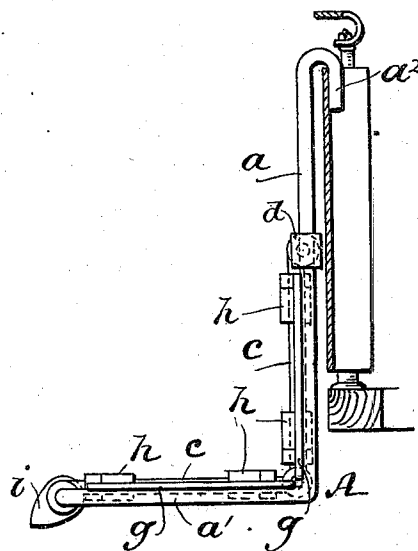


Fig. 3.



WITNESSES:

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GEORGE HENRY MODEMANN, OF NEW YORK, N. Y.

FENDER FOR STREET-RAILWAY CARS.

SPECIFICATION forming part of Letters Patent No. 535,388, dated March 12, 1895.

Application filed December 14, 1893. Serial No. 493,631. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY MODEMANN, a citizen of the United States, and a resident of the city of New York, county and State of New York, have invented certain and new useful Improvements in Fenders for Street-Railway Cars, of which the following is a specification.

This invention relates to fenders for street railway cars and other vehicles and has for its object to provide means whereby a passerby recklessly or inadvertently venturing in front of a rapidly moving car may be automatically caught up and prevented from falling beneath the wheels of the vehicle, all possible injury to life or limb when the fender strikes the pedestrian, being also avoided.

The invention consists in the novel construction and arrangement of parts herein-after more fully described and particularly pointed out.

In the accompanying drawings, in which like letters of reference indicate corresponding parts, Figure 1 is a perspective view of my improved device attached to the forward end of a street railway car. Fig. 2 is a similar view of the fender when collapsed, and Fig. 3 is a side elevation of the same, the car platform being in section.

My invention is constructed and operated substantially as follows:

The frame A is formed of two rods *a* provided at their upper ends with the hooks *a*² and extending perpendicularly downward a sufficient length to rest almost upon a level with the track when attached to a car, and then bent at right angles to form the horizontal supporting rods *a*'. Cross bars *b b'* connect the side rods at the top and bottom respectively.

Toggles *c*, at each side of the frame, are pivoted, the lower end to the cross-bar *b'* and the upper end to a loop *d* clasping the perpendicular rod *a* upon which it slides. Between the two upper members of the toggles *c*, and again between the two lower members, are stretched the wire nettings *ee'*, the said members being held apart by one or more cross-bars *f*. To each member of the two toggles is secured a side guard or wing *g* of substantially triangular shape and pivotally attached thereto by means of loops *h*. The center of

these guard-wings is formed of wire netting similar to the body of the device.

At the front of the fender and rigidly fastened to the frame A is a cushion *i*, of rubber or other elastic or flexible material, the object of which is to lessen the shock of contact with the car.

The operation of the device will be readily apparent.

The fender being normally in the position shown in Fig. 1 comes in contact with the person standing upon the track, who, being struck just above the ankles by the rubber cushion *i*, is tripped up and gently deposited in the center of the fender, the toggles collapsing beneath his weight and the fender assuming the position shown in Figs. 2 and 3. As the toggles *c* collapse the members thereof and the intervening frames are transposed from the oblique to a perpendicular and horizontal position respectively, and at the same time the guard wings *g* assume the same positions in alignment with their adjoining portions of the main fender. The action of these wings is precisely the same as though they were rigidly secured to the respective members of the toggles *c*, in alignment therewith, with the exception that the said wings being pivoted, normally hang at slightly obtuse angles from the main frames, and consequently only the inner or pivoted sides thereof take the downward movement on the collapse of the fender. The supporting rods *a* and *a'* prevent any rearward or downward movement of the wings, and therefore act as guides to force the points of the wings outwardly upon a substantially horizontal plane and serve to catch the pedestrian should he be thrown to one side, thus preventing his falling beneath the platform and wheels of the car.

I do not confine myself to the use of wire netting only, in the body or the guards of the fender, nor to the exact form and details of construction herein set forth, as the same may be changed or modified, as circumstances may be rendered desirable.

Having thus described my invention, what I claim is—

1. A fender for street railway cars or other vehicles, adapted to collapse beneath the weight of a body, to form a seat or repository therefor, the said fender being provided with

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wings at either side thereof pivoted thereon in such manner as to be outwardly extended, by the collapse of the fender, to a horizontal and vertical position respectively, substantially as shown and described.

5 2. A fender for street railway cars and other vehicles, consisting of a frame adapted to be attached to the front of a car, toggles pivoted at each side of the frame to the lower end
10 thereof, and sliding thereon at the top, cross-bars connecting each member of the toggles at top and bottom, a wire netting intervening the cross-bars of the upper members, and a second netting intervening the cross-bars
15 of the lower members, substantially as shown and described.

3. A fender for street railway cars or other vehicles consisting of a frame adapted to be attached to the front of a car, toggles mounted
20 on the said frame, a supporting material intervening the toggles and wings attached by loops to each of the said toggles, and adapted to be extended outwardly by the collapse thereof, substantially as shown and described.

25 4. A fender for street railway cars and other vehicles consisting of a frame adapted to be attached to the front of a car, toggles mounted

on the said frame, a supporting material intervening the toggles, wings attached by loops to the said joints and adapted to be extended
30 outwardly by the collapse thereof, and an elastic cushion secured to the forward end of the frame, substantially as shown and described.

5. A fender for street railway cars or other vehicles, consisting of a frame provided with hooks by means of which it may be attached to the dashboard of a car, toggles, at each side of the said frame, pivoted to the lower ends thereof and to loops sliding on the upper ends
40 thereof, a wire netting stretched between the toggles, wings movably attached by loops to the said toggles and adapted to be extended by the collapse thereof, and an elastic cushion rigidly secured to the forward end of the
45 frame, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 8th day of December, 1893.

GEORGE HENRY MODEMANN.

Witnesses:

MARTIN L. COLLINS,
BEASL. WATTENBERG.