

(No Model.)

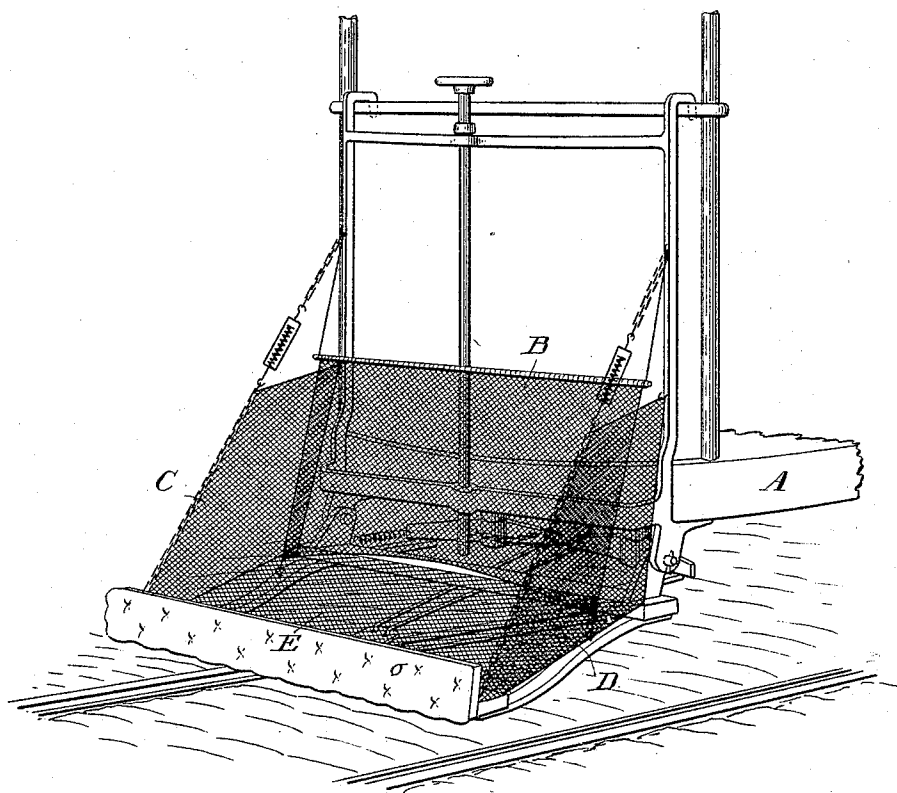
2 Sheets—Sheet 1.

H. MILLS.
LIFE GUARD FOR CARS.

No. 537,929.

Patented Apr. 23, 1895.

Fig. 1.



WITNESSES:

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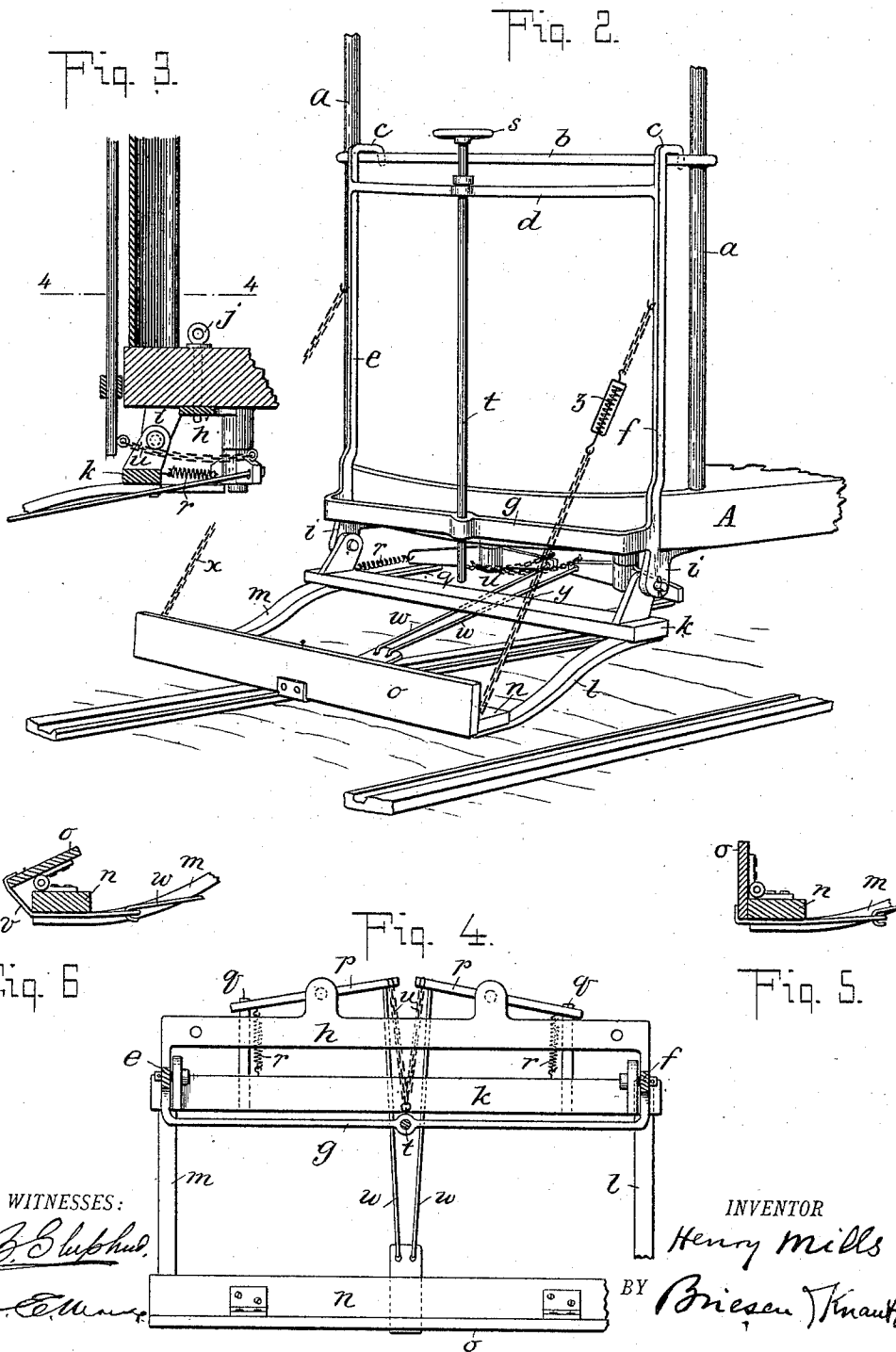
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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE

HENRY MILLS, OF BROOKLYN, NEW YORK, ASSIGNOR TO THOMAS ADAMS, JR., OF SAME PLACE.

LIFE-GUARD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 537,929, dated April 23, 1895.

Application filed February 13, 1894. Serial No. 500,097. (No model.)

To all whom it may concern:

Be it known that I, HENRY MILLS, a resident of Brooklyn, Kings county, State of New York, have invented certain new and useful
5 Improvements in Life-Guards for Cars, of which the following is a specification.

My invention relates to life guards for cars, and has for its object to prevent persons from being run over should they get in front of an
10 approaching car.

To this end my invention consists in a life guard which is normally supported upon a car a short distance above the level of the road-bed, and which will be automatically
15 dropped by striking against a person or other obstruction in the path of the car to pick up the same.

A further object of my invention is to provide a life guard which is readily removable, so that it may be used on either end of the
20 car interchangeably.

In the drawings forming part hereof, Figure 1 is a perspective view of a car showing one form of my invention applied thereto.
25 Fig. 2 is a detail perspective of the same, some of the parts being removed for clearer illustration. Fig. 3 is a broken away central vertical longitudinal section of Fig. 2. Fig. 4
30 is a plan view of the guard detached, partly in section, the same being taken on line 4—4 of Fig. 3. Figs. 5 and 6 are detail views, partly in section, showing in two different positions
parts presently to be described.

In the drawings, A is the front platform of a car upon which may be mounted suitable
35 standards *a* to support a rail *b*. This is a usual and ordinary construction of street cars. Hung to this platform in any suitable manner, such as by means of hooks *c c*, is a
40 suitable supporting frame shown here as consisting of the connected bars *d, e, f, g, h*. This frame may be secured to the car in any suitable manner, such as by a removable pin
45 or pins *j* passing through the platform, and a perforation or perforations in the bar *h*.

From the supporting frame preferably depend lugs *z*, which carry a pivoted forwardly extending fender preferably consisting of
50 the rear cross-bar *k*, the front cross-bar *n*, and connecting bars *l* and *m*. This fender is pivotally supported from the supporting

frame, but it may be supported from the car, if desired. Mounted on the bar *h* of the supporting frame are one or more pivoted latches
55 *p p*, with which engage one or more projections *q q* of the fender, and serve to hold the fender in an elevated position, as shown. These latches have suitable restoring springs, as *r r*, and may be operated from the platform by means of the wheel *s* and rod *t* on
60 the supporting frame, and connections *u u*. It will be observed that these latches or supporting mechanism are wholly disconnected from the fender but are adapted to engage
65 therewith to hold the same in an elevated position.

Pivoted to the forward part of the fender, preferably to the front cross-bar *n*, is a trigger *o*, preferably in the form of a slab or board,
70 as shown. This trigger serves to operate the latches by any suitable connection, such as the band *v* and cords or chains *w w*. To the fender and supporting frame nets or screens
75 may be secured, such for instance as shown at B, C, D and E in Fig. 1. The trigger board may likewise be padded, if desired.

The fender may have chains or cords *x y* connected to it and to a fixed support, such as the supporting frame, to assist in supporting it, and in these chains are interposed
80 springs *z* which will serve to take up the slack in the chains when the fender is in its elevated position.

The mode of operation is as follows: The fender is held in its elevated position, as
85 shown, by the projections *q q* engaging under the latches *p p*. The front cross-bar is by this means held a short distance above the level of the road-bed, say, about four inches. If, now, an obstruction, such as a human body,
90 be upon the track, the car, in moving forward, will bring the trigger of the fender against the body, and the trigger will be forced back, as shown in Fig. 6, which will have the effect
95 of pulling on the connections, swinging the pivoted catches from beneath the projections *q* of the fender and allowing the fender to swing down by gravity until the weight thereof is borne by the chains and the front part
100 hangs a short distance above the level of the roadbed. The body will now be picked up by the fender and carried along, the nettings and

the paddings on the trigger preventing any serious injury to the person. It will be observed that when the trigger has been sprung, the fender will be held from rising by the projections *q q* engaging over the latches *p p*. It will also be observed that the fender may be readily folded up against the supporting frame and secured in this position when desired.

Although I may make the trigger of any suitable construction, I prefer to make it in the form shown; that is to say, in the form of a board pivoted at its lower edge and extending upward for some distance, for the reason that after such trigger has been sprung and the body is carried by the fender, the trigger board will form a sort of front or retaining wall to prevent the body from falling out of the fender.

When the car has been stopped and the body removed, the parts may be restored to their normal position and the device will again be in condition for use.

I desire it to be expressly understood that I in no sense limit myself to the construction or arrangement of devices shown herein as it is obvious that the devices themselves, their construction, their arrangement, and their interactions may be greatly varied without departing from the spirit of my invention, but

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

1. In a life guard for cars, the combination of a pivoted drop fender, movable latches wholly disconnected from the fender, but adapted to engage therewith to hold the same in an elevated position, a trigger pivotally mounted on the pivoted drop fender and moving therewith when the same is dropped, and a connection between the trigger and the movable latches for moving the same to release the fender, as and for the purposes set forth.

2. In a life guard for cars, the combination of a pivoted fender, movable supporting mechanism wholly disconnected from the fender but adapted for engagement therewith to hold the fender in an elevated position, a trigger consisting of a board pivoted to the pivoted fender, and a cord or band connecting the trigger with the supporting mechanism for holding the fender in an elevated position.

3. In a life guard for cars, the combination of a drop-fender pivotally supported upon a car, projections upon the fender, pivoted latches with which these projections engage to hold the fender in an elevated position, a trigger pivotally mounted upon the pivoted drop-fender, and a connection between the trigger and the pivoted latches, as and for the purposes set forth.

4. In a life guard for cars, the combination of a fender, supporting mechanism wholly disconnected from the fender but adapted to engage therewith to hold the same in an elevated position, a front cross-bar on the fender, a trigger pivotally connected to said front cross-bar, and a connection between the trigger and the mechanism for holding the fender in an elevated position, as and for the purposes set forth.

5. In a life guard for cars, the combination of a supporting frame, a fender pivotally connected thereto, supporting mechanism on the supporting frame wholly disconnected from the fender but adapted to engage therewith to hold the fender in an elevated position, a trigger pivotally mounted on the pivoted fender, and a connection between the pivoted trigger and the mechanism for holding the fender in an elevated position, as and for the purposes set forth.

6. In a life guard for cars, the combination of a supporting frame, having hooks *c c*, and perforated bar *h* together with a pin or pins, *j* to engage the perforations in the bar, whereby a life guard may be removably secured to a car, substantially as described.

7. In a life guard for cars, the combination of a pivoted fender, movable supporting mechanism therefor, the said fender being provided with a front cross-bar *n*, having hinged thereto a board *o*, and a connection between the board *o* and the supporting mechanism for the fender for moving the same to release the fender, substantially as described.

8. In a life guard for cars, the combination of a supporting frame, a fender pivotally connected thereto, a movable supporting device on the supporting frame, wholly disconnected from the fender but adapted to engage therewith to hold the same in an elevated position, a trigger pivotally mounted on the pivoted fender and moving therewith when the same is dropped, and a connection between the pivoted trigger and the movable supporting device, as and for the purposes set forth.

9. In a life guard for cars, the combination of a pivoted fender, pivoted latches wholly disconnected from the fender but adapted to engage therewith to hold the same in an elevated position, a trigger pivotally mounted on the pivoted fender and moving therewith when the same is dropped, and a connection between the trigger and the pivoted latches for moving the same to release the fender, substantially as described.

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