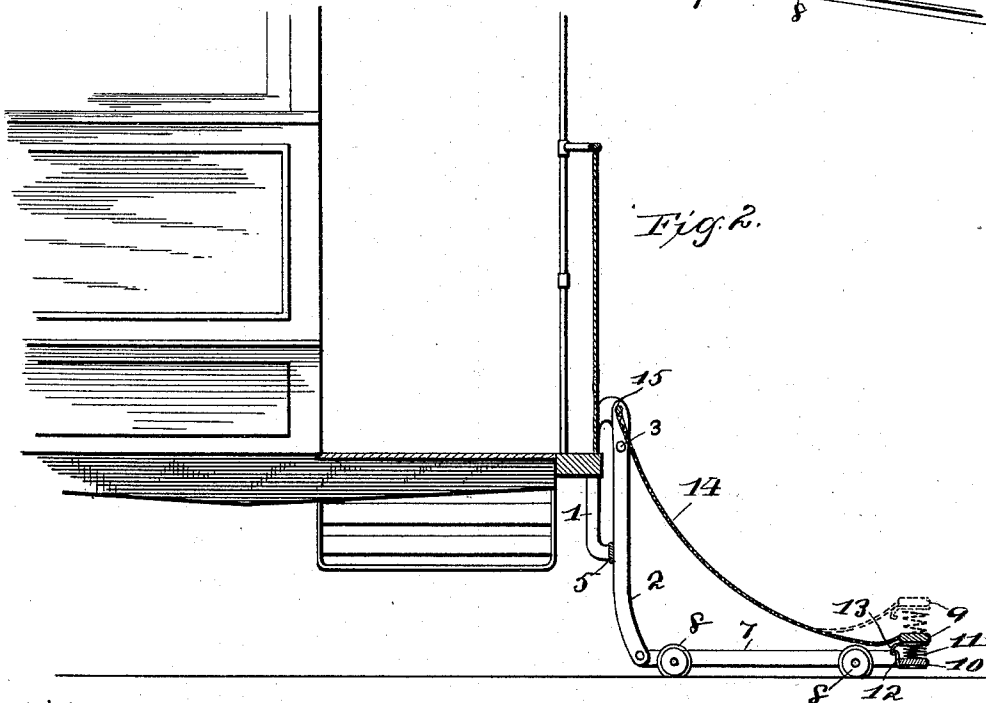
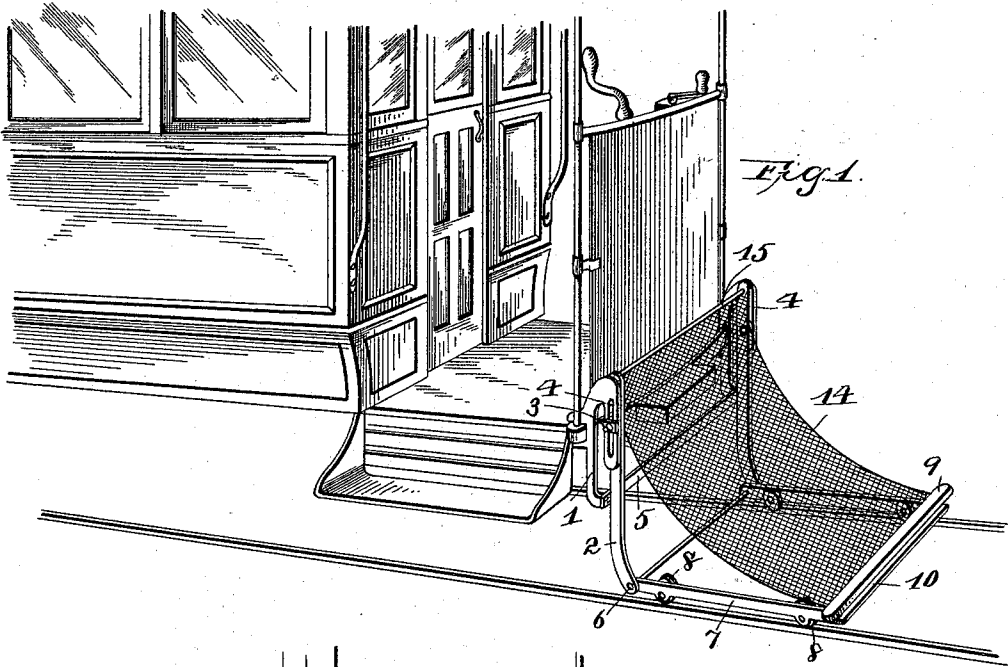


(No Model.)

A. F. S. COLBURN.
CAR FENDER.

No. 568,191.

Patented Sept. 22, 1896.



Witnesses:

E. C. Wurdeman
S. Williamson

Inventor

Augusta F. S. Colburn
By *Geo. H. Holgate*
Attorney

UNITED STATES PATENT OFFICE.

AUGUSTA F. S. COLBURN, OF PHILADELPHIA, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 568,191, dated September 22, 1896.

Application filed November 15, 1895. Serial No. 569,001. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTA F. S. COLBURN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in car-fenders, and has for its object to provide such a device which will automatically pick up a person when coming in contact therewith and carry him safely until the car can be stopped, and its principal features are that the fender shall always maintain the same relative position to the track; that it shall not be affected by the oscillation of the car; that it may be readily folded up out of the way when not desired for use, and when the person has been precipitated upon the netting the force of the contact will cause the front end of the fender to be elevated in such a manner as to prevent the person from rolling thereof.

With these ends in view the invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which my invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by number to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective of one end of the car having my improved fender attached thereto, and Fig. 2 a section of the same.

Similar numbers denote like parts in both views of the drawings.

1 represents a bracket-frame, which may be secured to the car in any suitable manner, and 2 a depending frame which is pivoted at 3 to the bracket-frame in such a manner as to permit its up-and-down movement thereon, and this is accomplished by bolts sliding in the slots 4 or in any other well-known manner.

5 is a cross-bar secured to the bracket-frame and against which the frame 2 is adapted to bear, so as to prevent any rearward-swinging movement. To the lower end

of the frame 2 at 6 is pivoted a trundle-frame 7, in which are journaled suitable trundle-rolls 8, adapted to travel upon the rails of the track.

9 is a buffer-bar secured to the foot-board 10 by the springs 11, so as to have a tendency to move upward when not held against the actions of the said springs, and 12 is a catch projecting upward from the foot-board and adapted to engage with the latch 13, secured to the buffer-bar; and by this means the buffer-bar is held down against the action of its springs.

14 is a netting secured to the buffer-bar and extending rearward and upward to the rod 15, to which it is attached. This rod is extended between the extensions 16 of the frame 2, so that the position of the netting will not be disturbed by the oscillations of the car. Thus it will be seen that should my improved fender, when attached to a car moving rapidly along the track, come in contact with a person said person would be struck by the buffer-bar and precipitated upon the netting 14. The force of this blow would press down the buffer-bar, thereby disengaging its latch from the catch 12, which would permit the springs to move it upward to the position shown in dotted lines in Fig. 2, thereby forming a slack in the netting sufficient to prevent the person from rolling off.

Provision may be made for permitting the fender to follow a curve in the track by pivoting the bracket-frame to the front of the car, so that it may swing, but as a car usually passes around a curve at a very limited rate of speed and it is seldom necessary for the fender to be put into use upon such an occasion the trundle-rolls may be made smooth-faced, so that they will swing into the street, thus avoiding the necessity of having to pivot the bracket-frame.

One of the greatest disadvantages of the fenders now in use is that on account of being rigidly secured to the car they take the oscillating movements thereof to such an extent as to cause them to jump up and down, necessitating their normal position being so high above the track as to render them almost useless in that they will pass over a person if the latter should be prostrated upon the track; but this disadvantage is obviated

by the use of my improvement in that the fender always travels in the same relative position to the track and so close thereto as to make it impossible for the smallest person to be passed over, and as the depending frame 2 is slidingly connected to the bracket-frame it will be seen that the oscillation of the car will have no effect upon the position of the fender relative to the track, thus enabling the fender to pick up the smallest person, even though he be lying lengthwise in front of the car.

When it is desired to couple a car to another or run it in an opposite direction, the fender is easily set out of the way by folding, first, upon the pivot-point 6, and then, if found necessary, upon the point 3, and retained in any suitable position by snap-hooks or the like.

In practice it will be found that by the use of my improvement every person coming in contact with the fender will be safe from injury, even though the car be running at an exceedingly high rate of speed.

I am aware that slight modifications might be made in the exact construction here shown and described without departing from the spirit of my invention, but as this construction is such as to render the cost of the fender insignificant, in comparison with the advantages to be gained thereby, I prefer this to any other.

Having thus fully described my invention, what I claim as new and useful is—

1. In a car-fender a trundle-frame, a rear vertical frame hinged thereto, a bolt secured to the upper part of the vertical frame, a

bracket attached to a car having a vertical slot in which the bolt is adapted to slide and a net secured between the forward end of the trundle-frame and the top of the vertical frame, as and for the purpose described.

2. In a car-fender, a trundle-frame, a vertical frame hinged to the rear thereof, a bolt extending from the upper part of the vertical frame, a bracket secured to the front of a car, an arm of said bracket having a vertical slot in which said bolt is adapted to slide, a second arm of the bracket extending downward and having a buffer-rod secured thereon, a buffer on the front end of the trundle-frame and a net secured to said buffer and to the top of the vertical frame, as and for the purpose described.

3. In a car-fender, a trundle-frame, a vertical frame hinged to the rear thereof, a bolt secured to the upper part of the vertical frame, a bracket attached to a car having a vertical slot in which the bolt is adapted to slide, a spring-pressed buffer on the forward end of the trundle-frame, a catch adapted to hold said buffer against the action of springs and be released by pressure and a net secured between the buffer and the top of the vertical frame, as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

AUGUSTA F. S. COLBURN.

Witnesses:

W. M. TAYLOR,

S. S. WILLIAMSON.