

(No Model.)

2 Sheets—Sheet 1.

J. B. LYFORD.  
SAFETY FENDER FOR STREET CARS.

No. 545,704.

Patented Sept. 3, 1895.

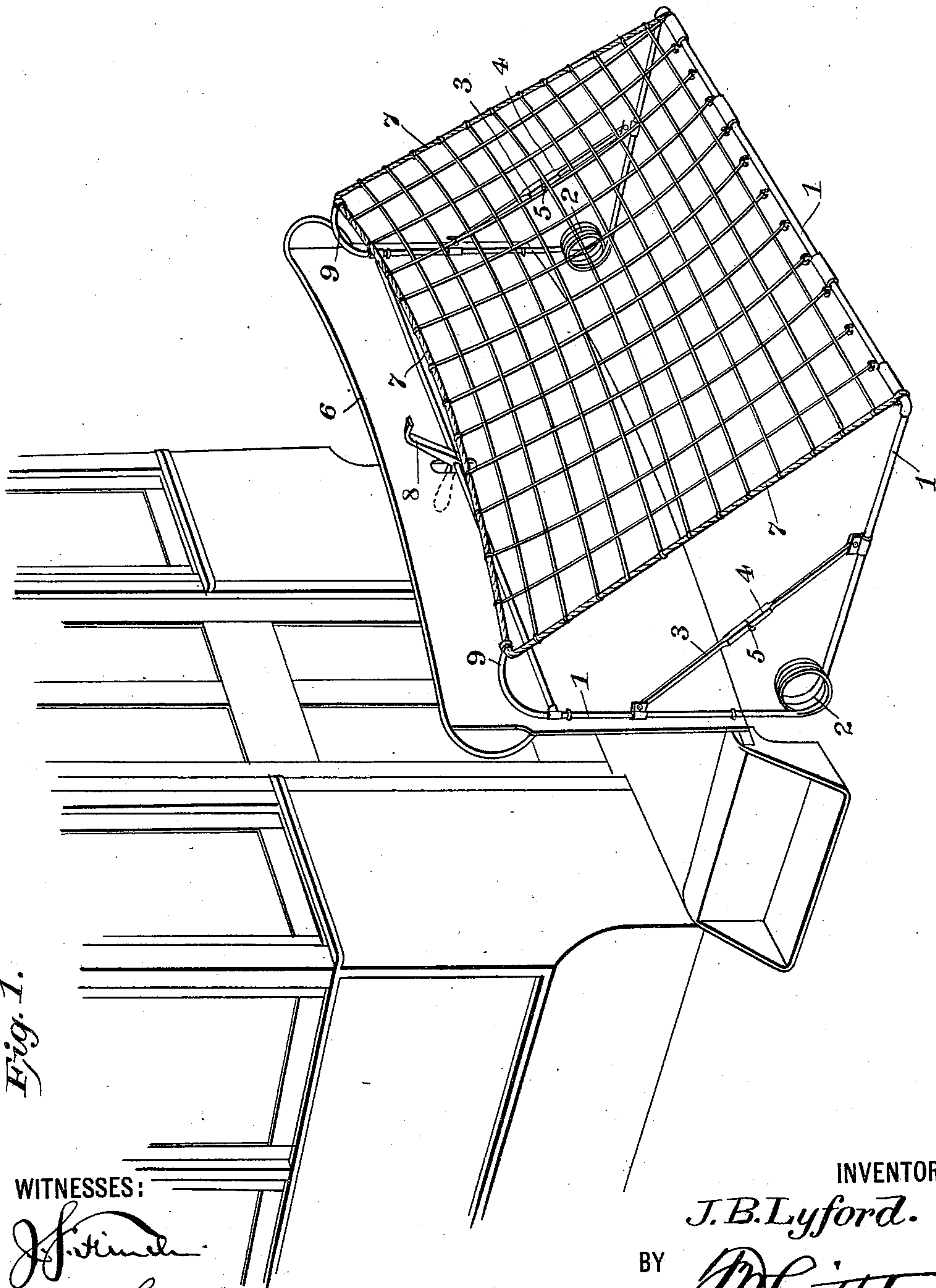


Fig. 1.

WITNESSES:

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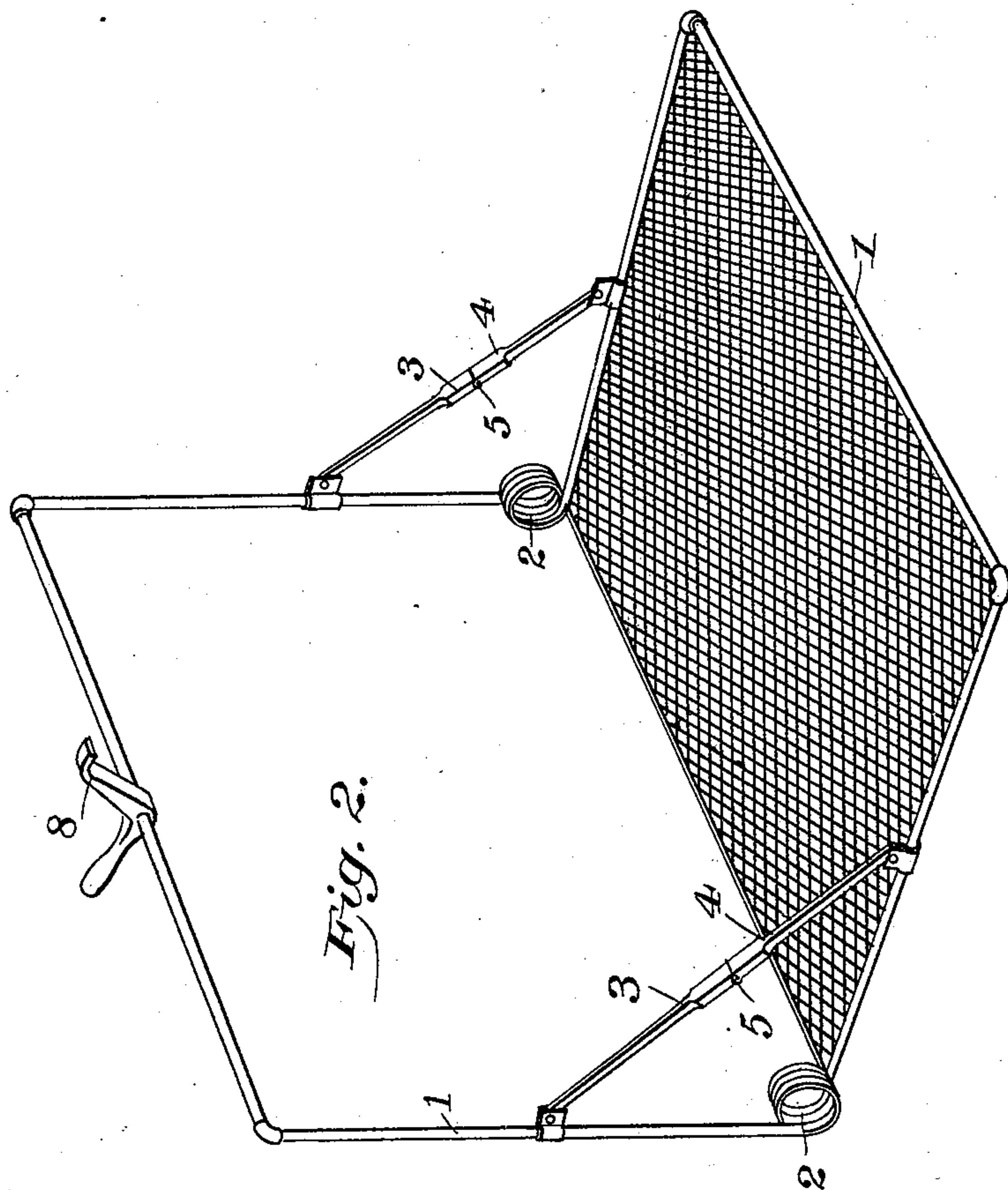
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WITNESSES:

*J. F. Finch.*  
*M. T. Longden.*

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# UNITED STATES PATENT OFFICE.

JAY B. LYFORD, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE  
LYFORD CAR FENDER COMPANY, OF BOSTON, MASSACHUSETTS.

## SAFETY-FENDER FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 545,704, dated September 3, 1895.

Application filed August 29, 1894. Renewed July 20, 1895. Serial No. 556,629. (No model.)

*To all whom it may concern:*

Be it known that I, JAY B. LYFORD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Safety - Fenders for Street-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in safety-fenders for street-cars, and has for its object to provide a simple and effective device whereby fatal accidents may be averted.

In the accompanying drawings, which form a part of this specification, Figure 1 is a view in perspective showing the front end of a car equipped with my improvement, and Fig. 2 a detail perspective of my improvement, showing the safety-net applied in a slightly-modified manner.

Similar numbers of reference denote like parts in both the figures of the drawings.

My improvement comprises an open rectangular frame 1, having at the angle thereof on each side coil-springs 2, so that it will be clear that the two leaves of said frame may be closed together against the resiliency of the springs. Pivoted to the vertical and horizontal parts of the frame on each side thereof are brace-rods 3 4, whose inner ends are hinged together, as seen at 5, whereby the lower part of said frame may be properly held and braced when in the position shown. The upper portion of the frame is secured in any suitable manner to the dashboard 6, and an ordinary net 7 is secured to the outer end of the bottom of the frame and to the top thereof, as shown in Fig. 1; or the net may be secured wholly to the bottom of the frame, as seen at Fig. 2, but I prefer the construction shown at Fig. 1 as better adapted for the purposes of a safety appliance.

8 is any ordinary catch-pin pivoted at the top of the frame and capable of engaging with the lower part of the latter to hold the same firmly when it is folded up against the resiliency of the springs 2. The brace-rods 3 4 are

in alignment when the frame is in the position shown, so that it will be readily understood that the lower portion of the frame cannot be raised until the hinge 5 is broken, so as to permit the rods 3 and 4 to fold together. This is an especial feature of my improvement, in that the bottom of the frame cannot be accidentally lifted by any obstruction so that the fender can pass over the same.

A great many fatal accidents are due to the fact that the fender striking against the body of a person will lift up, thereby permitting the body to be run over by the wheels of the car; but in my improvement the frame is immovable from the position shown except, as hereinbefore set forth, when the frame is folded.

In my preferred construction, as shown at Fig. 1, the upper ends of the side bars of the frame are curved outwardly, as seen at 9, and to the extremities of these curved portions the upper part of the netting is secured, the object of this construction being to remove the netting as far as possible from the dashboard in order that the body of a person falling within the net may not strike against such dashboard.

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

1. A safety fender for street cars, comprising an open rectangular frame having its upper and lower portions connected at their angle of junction by coil springs, and the brace rods hinged together and pivoted at their extremities to the upper and lower portions of said frame, substantially as set forth.

2. The combination of the open rectangular frame having a vertical portion adapted to be secured to the dash-board of a street car and having a horizontally extending lower portion connected to the upper portion by coil springs, the brace rods pivoted at opposite sides of the frame to said upper and lower portions respectively, said rods hinged together at their inner ends, and a safety net carried by said frame, substantially as set forth.

3. The combination of the open rectangular frame comprising an upper portion secured in

vertical position to the dash-board of a street  
car and provided with outwardly curved por-  
tions, a lower portion extending in a horizontal  
plane and coil springs connecting said upper  
5 and lower portions, the hinged brace rods  
pivoted to said upper and lower portions of  
the frame at opposite sides thereof, and the  
safety net secured to the bottom of the frame

and to said curved portions, substantially as  
set forth. to

In testimony whereof I affix my signature  
in presence of two witnesses.

JAY B. LYFORD.

Witnesses:

F. W. SMITH, JR.,

M. T. LONGDEN.