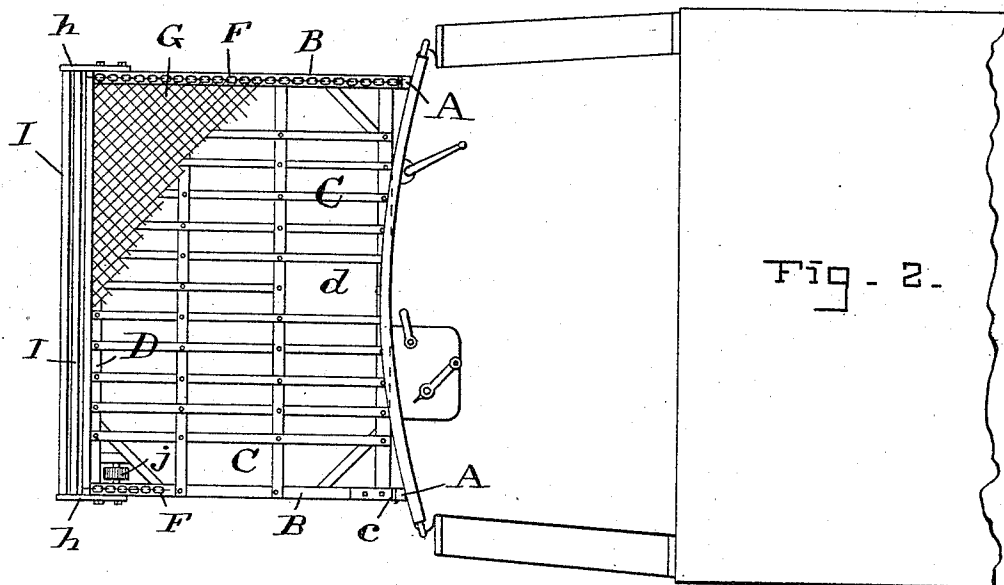
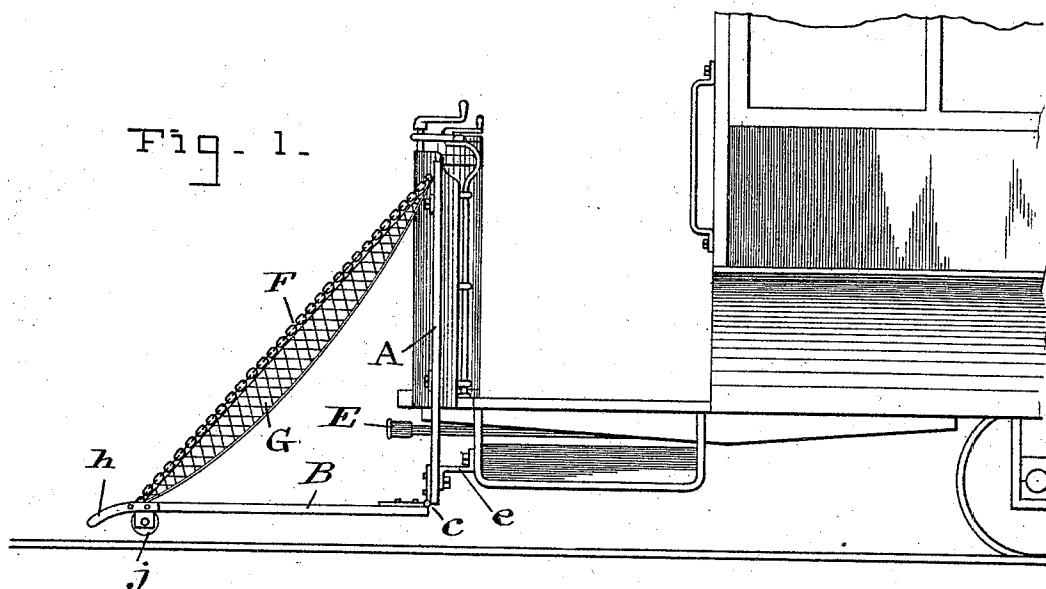


(No Model.)

A. P. CADDEN.
CAR FENDER.

No. 537,406.

Patented Apr. 9, 1895.



WITNESSES :

L. Ismy Van Horn,
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UNITED STATES PATENT OFFICE.

ANTHONY P. CADDEN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF
TO FRANCIS J. HAYDEN, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 537,406, dated April 9, 1895.

Application filed January 3, 1895. Serial No. 533,718. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY P. CADDEN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to certain new and useful improvements in safety fenders for cars, and has for its object to provide a simple device having improved features of construction, to prevent a person who may be run down by the car from getting under the wheels.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view of part of one end of a car showing my invention attached thereto in side elevation. Fig. 2 is a top or plan view of part of the car and the fender attached, part of the network apron being broken away.

In the accompanying drawings, the letter, A, designates the two vertical side bars of the fender which are bolted, one at each side, to the front of the car. To the lower end of each of these vertical bars, A, are hinged at, c, the rear ends of two lower side bars, B, whereby said lower bars may be turned or tilted up parallel with the vertical bars, A. Between these lower side bars are a number of spring slats extending in a direction longitudinally and transversely of the side bars and at right-angles to each other and interwoven to form an open-work yielding or spring platform. These slats may be made of "strap" iron, steel or some other suitable material which possesses strength and flexibility. A bar, B, extends across and connects the front ends of lower side bars, B. Normally, that is, during the ordinary running of the car, this platform has a horizontal position, as shown in Fig. 1, and said platform has at one part an opening, d, which, when the platform is turned up parallel with the bars, A, allows the coupling-head, E, of the car to project through in order to engage with the coupling-head on an adjoining car, when desired. A brace rod, e, is attached to the lower end of side bars, B, and to the car and supports the bars.

Two inclined chains, F, one at each side, are employed to hold or support the front end

of the platform section above the ground. The lower ends of the chains are suitably attached to the front ends of the lower horizontal side bars, B, and the upper ends of the chains are attached to the vertical bars, A, or to the car-front.

A flexible network buffer or apron, G, inclines in front of the car and has its lower end attached to the front cross-bar, D, and its upper end suitably attached to the chains, F, or to the car-front. When a person is run down by the car and falls on this network apron, the weight of the person's body will cause the apron to droop or sag down to the horizontal platform, C, by which it will be reinforced or assisted in supporting said person. This is very important where the network apron has become weakened through long service and where the weight of the person is considerable. This arrangement of network apron and platform, C, insures the retention of the person on the fender even if said network should accidentally give way.

An arm, h, is detachably secured to the free end of each lower side bar, B, at the front of the fender and the front end of each arm projects in advance of the cross-bar, D, and curves or projects down toward the street surface. By thus having the front part of the fender, which is the part most liable to be injured or broken, made detachable, said part when broken may be removed and another substituted without the necessity of replacing an entire side bar.

Two flexible bars, I, of rubber hose or other suitable material extend across at the front of the fender in advance of the cross-bar, D, and between the two arms, h, and serve to cushion the shock or concussion received by the person struck by the fender.

The platform, C, carries at each side near the front a roller, j. These rollers have position normally, during the ordinary running of the car, a short distance above the ground or track-rails, say two to six inches, and the lower peripheral rim-edges thereof extend below the down-projecting front ends of the arms, h. When the front part of the car "dips down" or oscillates, these rollers strike the car-tracks and run thereon and thus prevent the front of

the fender from moving farther downward and striking the stones of the street and being injured or broken.

5 Having thus described my invention, what I claim is—

10 In a safety fender for cars, the combination of a car; two vertical side bars, A, bolted to the front of the car-body; two horizontal side bars, B, secured at their rear ends to said vertical bars by hinges, c; a bar, D, extending across and connecting the front ends of the horizontal side bars; a number of straight flat spring-slats extending at right-angles to each other and connecting with said side bars and
15 cross-bar, D,—said slats interwoven and forming a spring platform having at its rear an

opening, d, to allow a coupling head to project through when the platform is turned up; an inclined chain at each side of and above the platform; an inclined network apron attached to said chains; a detachable arm, h, secured at the front end of each of the horizontal side bars and projecting in advance of the front cross bar; and tubular flexible hose extending across in front of the cross-bar and secured to said detachable arms. 20 25

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

ANTHONY P. CADDEN.

Witnesses:

CHARLES B. MANN, Jr.,
C. CALVERT HINES.