

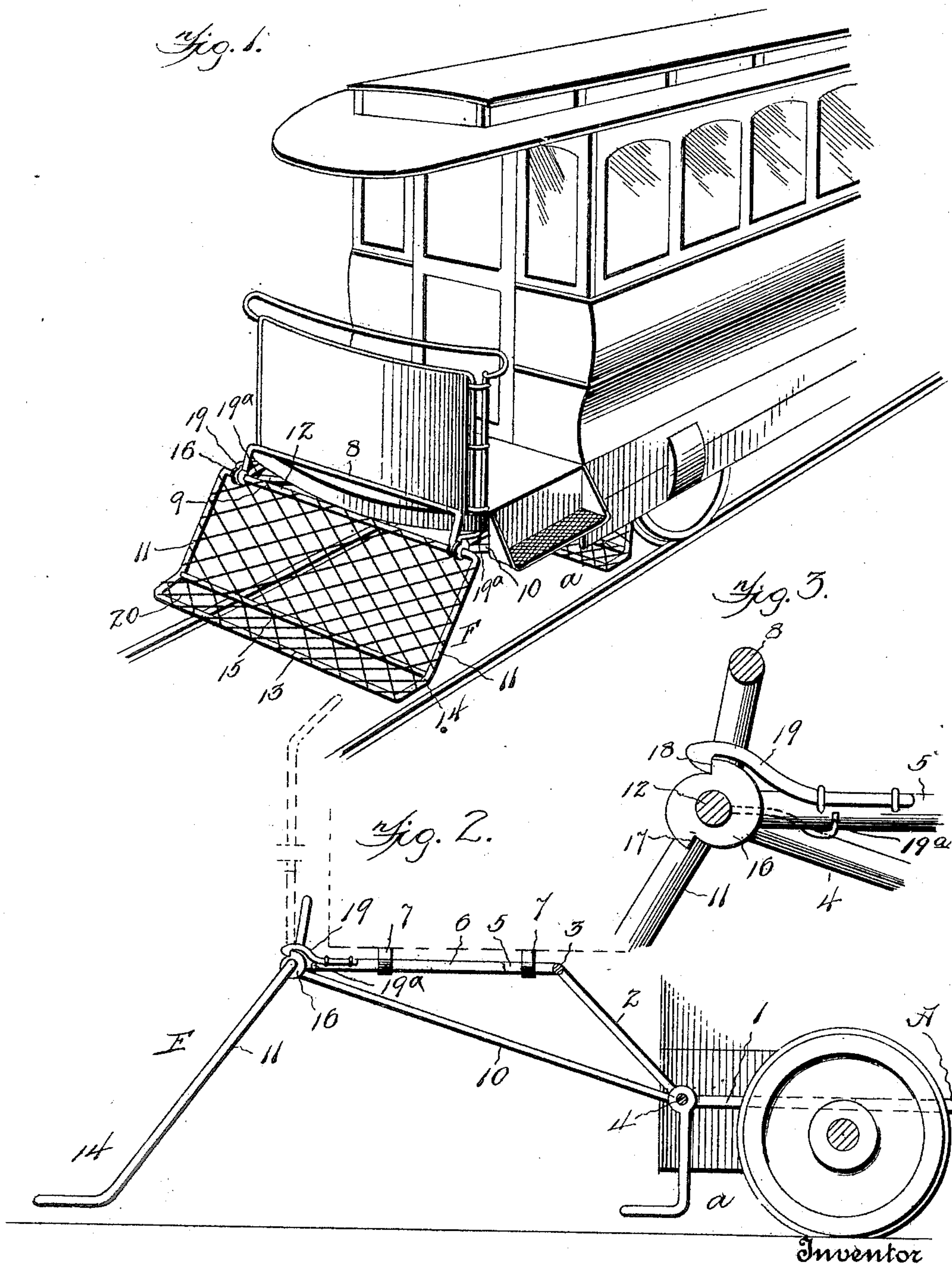
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Patented Feb. 12, 1901.

G. W. GARDNER.  
STREET CAR FENDER.

(Application filed Oct. 31, 1900.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE W. GARDNER, OF PHILADELPHIA, PENNSYLVANIA.

## STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 667,979, dated February 12, 1901.

Application filed October 31, 1900. Serial No. 35,041. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. GARDNER, 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 Street-Car Fenders; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to improvements in street-car fenders of that kind or construction adapted to ride with the front or pick-up bar closely adjacent to the road-bed and also to be turned up to substantial verticality against the end of the car or standing front thereof; and the object is to provide a fender which is strong, durable, certain, and efficient in action or operation and which is also of simplified construction.

The invention consists in the novel arrangement or aggroupment of parts and their combination, as will be hereinafter fully specified, and the particularity thereof distinctly pointed out in the claims.

I have fully and clearly illustrated my improvements in the accompanying drawings, to be taken as a part of this specification, and wherein—

Figure 1 is a view in perspective showing the fender as attached to a car and the fender proper turned down in operative position over the road-bed. Fig. 2 is a detail side view, on a larger scale than Fig. 1, showing the framework of the fender, the turned-up position being indicated by dotted lines. Fig. 3 is a detail view of the means for holding the fender in either turned-up position or in down position.

Referring to the drawings, A A designate side bars or rods running along the sides of the wheels and secured rigidly in position in any well-known manner. These bars A extend well to the front of the wheels, as at 1, where they are bent upward, as at 2, and united by an upper cross-bar 3 and at the lower bend or turn are further united and strengthened by a cross-bar 4, the bars 3 4

and upright end pieces or portions constituting and forming a rectangular frame which reaches upward and under the platform of the car, as shown. From the upper cross-piece of this frame are extended two parallel horizontal bars 5 6, being extended through keepers or clips 7 on the under side of the platform, the bars 5 6 being turned up substantially vertical and continued by an integral cross-bar 8, forming a back guard extending above the pivotal bar of the fender and against which an object may be landed and prevented from landing directly against the car-plate. These frames are braced by oppositely-disposed brace-rods 9 10, having their inner and lower ends suitably secured to the lower cross-rod of the rectangular frame, as indicated in the drawings, and their outer and higher ends secured and united in proper manner to the outer ends of the parallel supporting-rods 5 6.

F designates the fender proper, composed of side bars 11 11 and upper and lower cross-bars 12 13, the side bars being bent at their lower portions, as at 14, so that the lower portions will lie and be carried substantially in alinement with the track and road-bed. At the bend of the side bars is a cross-bar 15, which strengthens and braces the fender-frame at this point. The upper bar 12 of the fender forms the support for the fender and is journaled to turn in bearings formed in or suitably secured to the meeting ends of the parallel bars and brace-rods of the fender-frame under the platform of the car. On the bar 12, contiguous to or closely adjacent to the bearing-points of the bar, is rigidly mounted a collar or disk 16, having formed therein at the proper points or places two teeth 17 18, placed at such relation or position that the former will be engaged by a spring pawl or catch 19 when the fender is turned up and will be held in such upturned position by this engagement, and then when the fender is turned down for use the notch or tooth 18 will be engaged by the spring pawl or catch and held in the turned-down position. The engagement of the teeth and catch may be severed by lifting the catch from the notch or tooth. As affording additional supporting means for the fender when turned down, catch-hooks 19<sup>a</sup> 19<sup>a</sup> are rigidly secured to the upper or



pivotal bar 11 of the fender and are projected rearwardly and then extended laterally and upwardly, so that they may engage or lodge under the brace-bars of the frame under the platform of the car, as clearly shown by dotted and full lines, Fig. 3.

The fender is provided with a suitable net of such size mesh as may be required and of such material as may be suited to the purpose.

The journal connection of the fender to the supporting-frame may be permanent or it may be detachable in the well-known manner. If the fender is detachable, of course both ends of the car have the frames of the fender secured thereto.

An auxiliary fender *a* may be mounted under the car in front of the wheels in the usual manner; but owing to the fact that the arrangement of the fender when turned down carries its outer and lower portion closely adjacent to the surface of the road the auxiliary fender at the rear may be dispensed with.

The utility of my improved fender is apparent to any one conversant with the art. It is carried down close to the road-bed, and when not in use may be turned up and held in vertical position.

I prefer to make the fender and its frames and bars out of pipe-irons of suitable size and strength.

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

1. A street-car fender, comprising supporting side bars adapted to be fastened to the truck of the car and formed with turned-up ends and connecting upper and lower cross-bars, parallel bars projected horizontally from the said upper cross-bar and having their outer ends turned vertically and connected by a cross-bar, brace-rods having their rear ends secured to the lower connecting-bar of the side supporting-bars and their front ends secured to the parallel bars, a fender composed of a single bar bent or formed in rectangular contour and having its upper cross-bar journaled in the outer ends of the parallel bars, and having its side bars bent at their lower

portions to stand substantially horizontal, and means to hold the fender in turned-up or turned-down position, substantially as described.

2. A street-car fender, comprising supporting-bars adapted to be fastened to the truck sides and formed with turned-up ends and connecting upper and lower cross-bars, parallel bars projected horizontally from said upper cross-bar and having their outer ends turned vertically and connected by a cross-bar, brace-rods having their rear ends secured to the lower connecting-bar of the side supporting-bars and their front ends secured to the parallel bars, a fender composed of a single bar bent or formed in rectangular contour and having its upper cross-bar journaled in the outer ends of the braced parallel horizontal bars, a disk having ratchets on the upper cross-bar of the fender, and a spring-catch to engage the ratchets of the disk and hold the fender in upright or turned-down position, substantially as described.

3. A street-car fender, comprising supporting side bars adapted to be fastened to the truck sides and formed with turned-up ends and connecting upper and lower cross-bars, parallel bars projected horizontally from said upper cross-bar and having their outer ends turned vertically and connected by a cross-bar, brace-rods having their rear ends secured to the lower connecting-bar of the side supporting-bars and their front ends secured to the parallel bars, a fender composed of a single bar bent or formed in rectangular contour and having its upper cross-bar journaled in the outer ends of the braced parallel horizontal bars, a disk, having ratchets, on the upper cross-bar of the fender, a spring-catch to engage the ratchets, and supporting-arms to engage the braces, and hold the fender from turning down too far, substantially as and for the purpose specified.

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

GEORGE W. GARDNER.

Witnesses:

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THOMAS W. WILLIAMS.