

No. 618,228.

Patented Jan. 24, 1899.

S. JOSEPH.
STREET CAR FENDER.
(Application filed May 31, 1898.)

(No Model.)

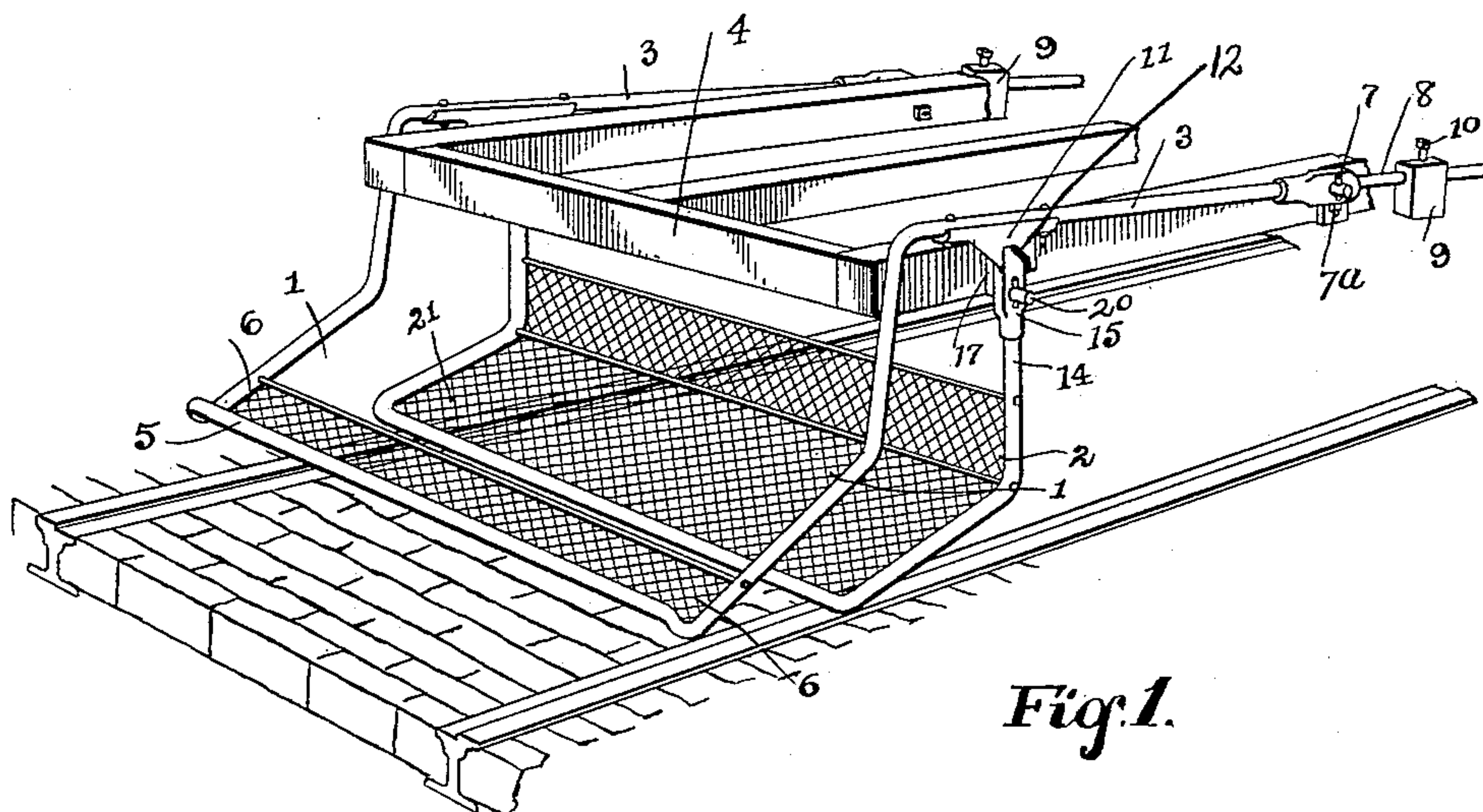


Fig. 1.

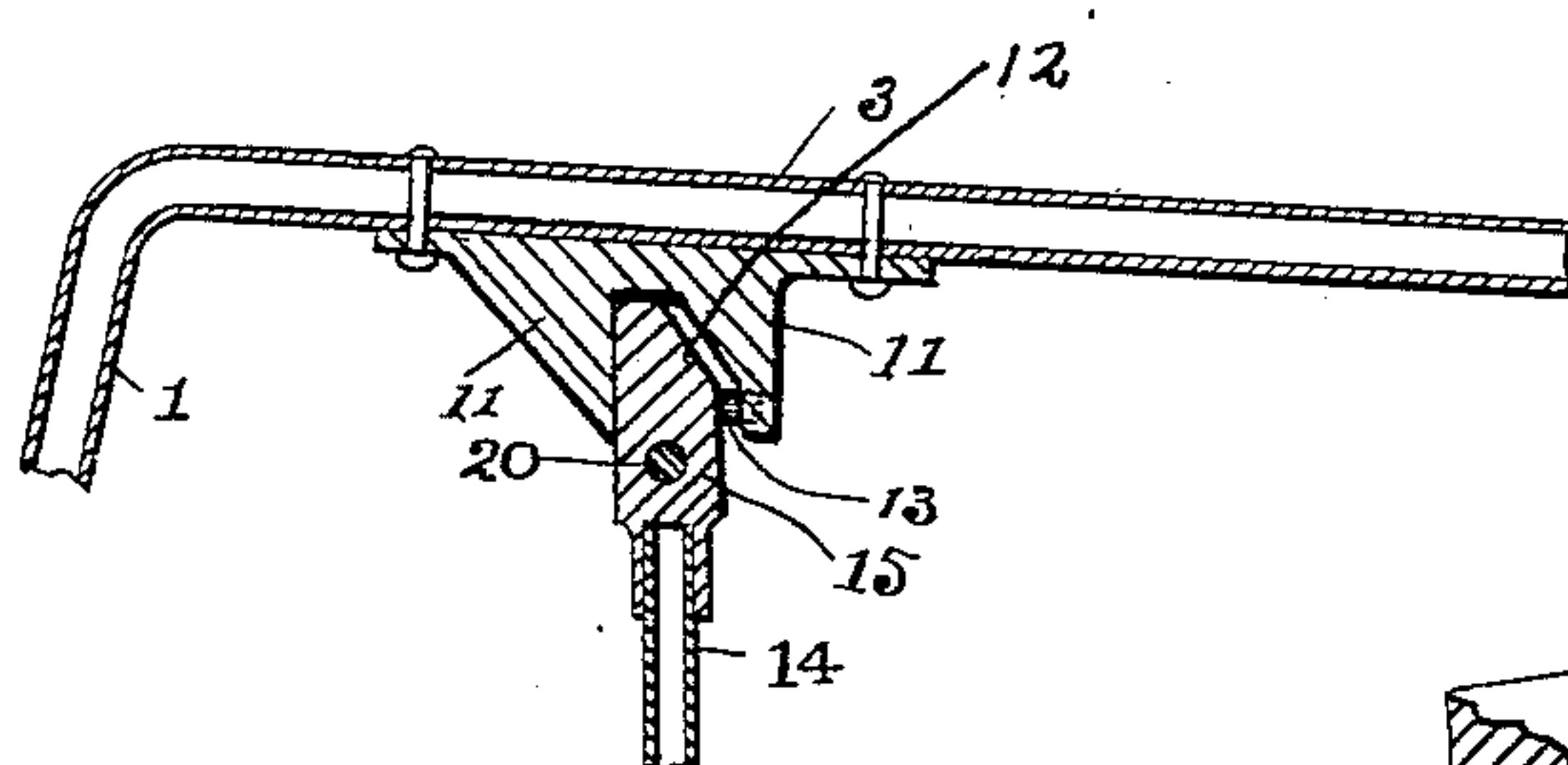


Fig. 2.

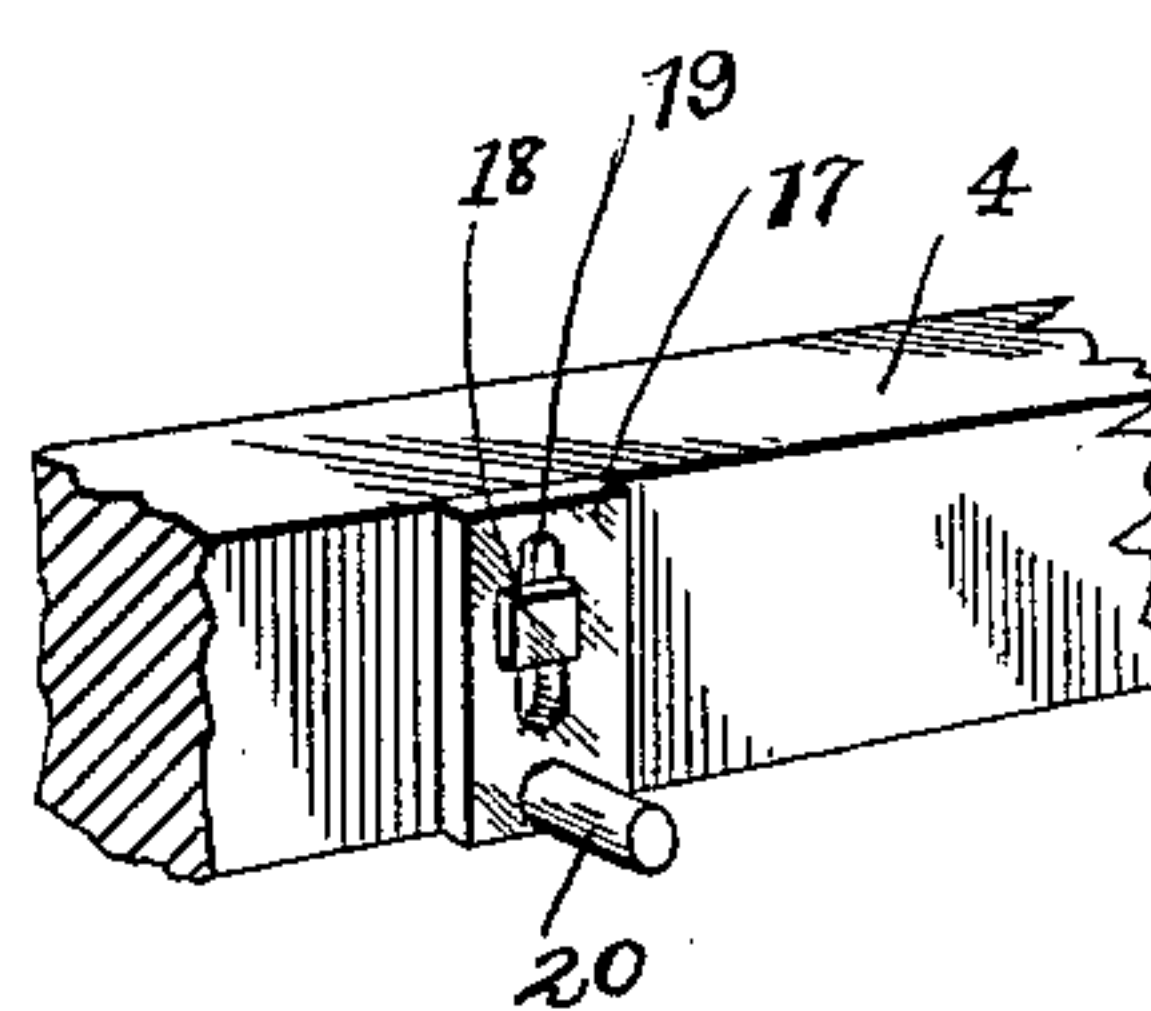


Fig. 3.

Witnesses
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SHELDON JOSEPH, OF PATASKALA, OHIO.

STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 618,228, dated January 24, 1899.

Application filed May 31, 1898. Serial No. 682,115. (No model.)

To all whom it may concern:

Be it known that I, SHELDON JOSEPH, a citizen of the United States, residing at Pataskala, in the county of Licking and State of Ohio, have invented a certain new and useful Improvement in Street-Car Fenders, of which the following is a specification.

My invention relates to the improvement of car-fenders of that class which are adapted for use in connection with street-cars and which are designed to take up and save the lives of persons with whom a car may come into forcible contact.

The objects of my invention are to provide an improved fender of this class of such construction and operation as to facilitate the taking up without serious injury of persons in the path of a moving car, to construct my improved fender in a simple and inexpensive manner, to so construct and arrange the parts thereof as to obviate any tendency toward the same readily getting out of order and to admit of a positive operation of the same, and to produce other improvements, the details of construction of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of a portion of a car-truck having my improved fender thereon. Fig. 2 is a detailed sectional view, enlarged from that shown in Fig. 1, of a portion of the fender-frame; and Fig. 3 is a detail view in perspective of a portion of a car-truck frame, showing my improved adjustable fender pivot-block.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I employ two separate fender-sections, the section 1 being, as will hereinafter be seen, in the nature of a trigger or contact section and being supported in front of the section 2. In the construction of the section 1 I employ a substantially U-shaped frame of metallic piping or similar material, of which 3 represents parallel and substantially horizontal arms, these arms 3 being fulcrumed to the side bars of the car-truck frame 4 in the manner hereinafter described. The forward portion of the frame-section 1 extends downward and thence outward or forward in the manner indicated

in Fig. 1. The forward end portion or transverse end rod of the frame 1, which is indicated at 5, is, as shown, preferably bent upward above the forward portion of the side rods or arms, and in rear of this upwardly-bent portion said side rods or arms are connected by a transverse strip of netting 6 of suitable width.

As indicated in the drawings, the rearwardly-extending and parallel side arms 3 have their rear portions fulcrumed at 7 to the side bars of the truck-frame 4, each of these arms 3 being provided with a rearward extension-rod 8, on which is movably supported a suitable weight 9, the latter being secured at the desired point on said rod 8 through the medium of a set-screw 10 or by other similar or well-known means.

Near the forward end portion of each of the side bars of the truck-frame each of the section frame-arms 3 has secured thereto a downwardly-extending catch-block 11, in the under side of which is formed a notch or recess 12 of desirable depth, this recess being preferably formed with a vertical forward wall and inclined rear wall, as shown. Suitably secured in a socket in the inclined rear wall of the recess 12 is a bearing-plug 13, of rubber or other suitable yielding material, the latter projecting slightly within the recess 12, as shown.

14 represents the main frame of the rear fender-section 2, this frame being of a general yoke-shape and having its rear portions extending vertically upward on the outer sides of the side bars of the truck-frame in the manner indicated. Each of the upwardly-extending arm portions of the frame 14 is provided with a head extension 15, which is in the nature of a latch-tongue, as shown, and which is of such form as to enter and fit neatly the recess 12 of the adjacent catch-block 11. In order to pivot or fulcrum the heads 15 of the vertical arms of the frame 14 in the position above described, I secure to the outer side of each of the truck side bars a vertical pivot-plate 17, which is adjustably connected to said truck-frame through the medium of a bolt 18, which passes loosely through a vertical slotted opening 19 of said plate. The plate 17 is, as indicated in the drawings, provided with an outwardly-projecting pivot

or fulcrum pin 20. Upon these pins 20 the heads 15 of the arms of the frame 14 are mounted to swing, as shown in Fig. 1. As also shown in said Fig. 1, I may cause the fulcrum-pins 7 of the frame-arms 3 to project from plates 7^a similar in construction to the plates 17.

As indicated at 21, I fill the space between the forwardly-extending frame-arms of the fender 2 with netting of a suitable material.

As indicated in the drawings, the tongue extensions 15 of the frame 14 are of such length or height as to normally raise the arms 3 of the frame 1 to positions slightly inclined from the horizontal. The forwardly-extending portions of each of the fender-sections are so inclined that when the tongues 15 are in engagement with the block-recesses 12 said forwardly-extending fender portions will be raised a desirable distance above the track-rails. It will be observed, however, that the fender-sections 1 and 2 are dependent on each other for their retention in the slightly-elevated position mentioned above, inasmuch as a disengagement of the tongues of the section 2 with the recesses of the section 1 must result in a dropping or downward-swinging movement of both of said sections.

In order to illustrate the operation of my device, I will assume that the parts are in the position indicated in Fig. 1 of the drawings and that a person struck or run down by the car has been thrown upon the trackway or path of said car. Owing to the elevation of the forward frame rod or arm 5 of the frame 1 and the additional elevation of the entire frame of said forward section from the track-rails or roadway, it is obvious that the forward portion of the fender-section 1 must so strike the body of a person upon the track as to raise said section 1 or the forward portion thereof, causing the latter to pass over the body. In thus raising the forward portion of the front fender-section it is obvious that the lever motion imparted to the frame of the latter must lift the blocks 11 out of engagement with the tongues 15 of the rear fender-section, resulting in a dropping of said rear fender-section until its forwardly-extending frame portion rests upon the track-rails. In this manner the network of the rear fender-section is in position to receive the body of the person over which the forward section has passed, as described, and the body thus taken up on said rear section is prevented from any contact with the wheels or other parts of the car.

Owing to the fact that a bolt connection

of the plates 17 is attained through slotted openings in said plates, it is obvious that the fulcrum or pivot points of the rear fender-section may be changed at will to different heights, thus providing for an adjustment of the rear fender which will adapt the same for use on cars having trucks of different heights from the trackway. In order to secure an effective and easy upward movement of the forward portion of the front fender, I employ the adjustable weights 9 on the rearward extensions of the frame-arms 3, said weights being adapted to be so supported on said extensions as to tend to counterbalance to some extent or compensate for the greater weight of the forward portion of the fender.

It will be observed that the production of my improved fender involves the use of comparatively few parts and that these parts are simple of construction and are of such form and arrangement as to admit of their readily being connected with the ordinary trucks of street-cars. It will also be observed that no part of the fender herein described is connected with the body of the car and that said fender is thus relieved from any rocking or jolting and consequent disengagement of the parts which might be contributed from the car-body.

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

1. In a car-fender the combination with the truck-frame and a fender-section 2 having its side arms fulcrumed thereto, of a forward fender-section 1 having its side arms fulcrumed in rear of the fulcrum-points of said section 2 and the latter having tongues detachably engaging recesses of said section 1 whereby both of said fender-sections are normally raised from the trackway, substantially as and for the purpose specified.

2. In a car-fender the combination with the truck-frame and a fender-section 2 having its rear frame portions adjustably fulcrumed to said truck-frame and having tongue extensions 15, of a fender-section 1 extending in front of said section 2 and adjustably fulcrumed to the truck-frame in rear of the fulcrum-points of said section 2 and recesses in the frame of said section 1 adapted to detachably receive the tongue extensions of said section 2, substantially as and for the purpose specified.

SHELDON JOSEPH.

In presence of—

C. C. SHEPHERD,
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