

(No Model.)

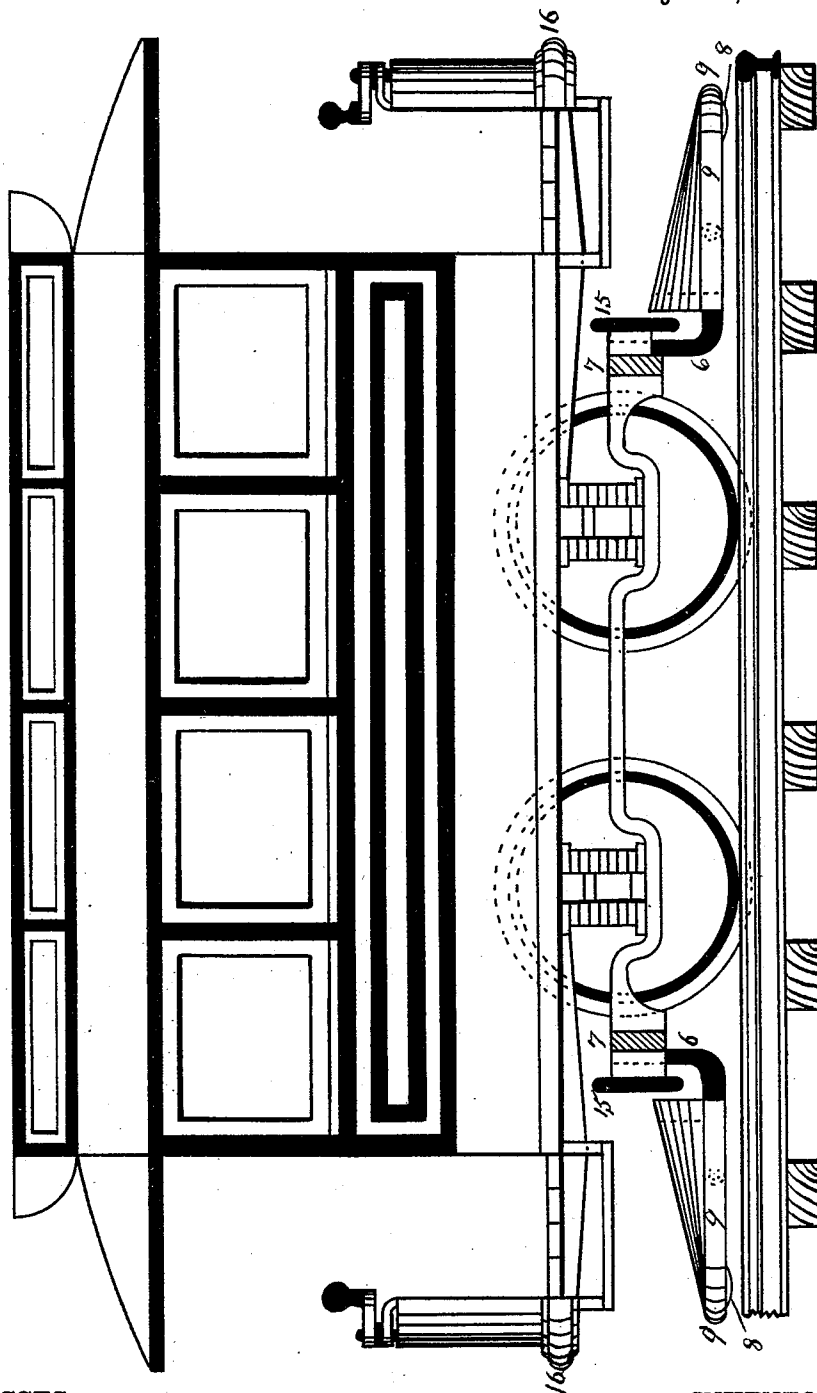
2 Sheets—Sheet 1.

P. L. BENNER.
CAR FENDER.

No. 582,844.

Patented May 18, 1897.

Fig. 1



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INVENTOR

P. L. Benner,
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2

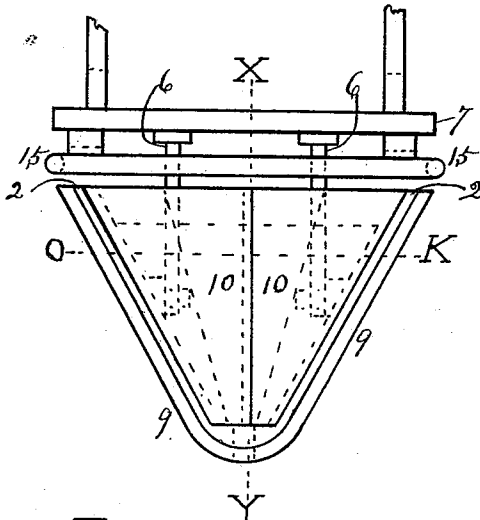


Fig. 3

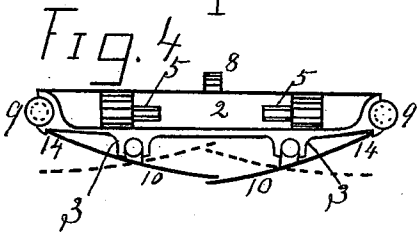
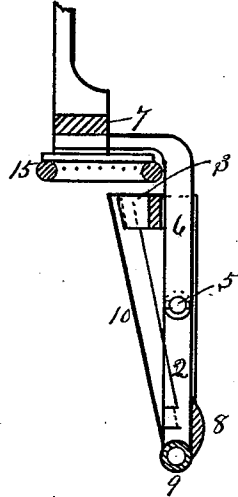


Fig. 5

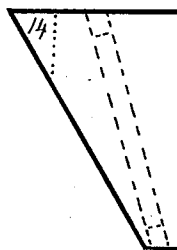


Fig. 6

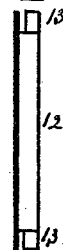


Fig. 7

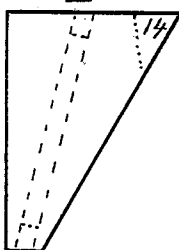


Fig. 8

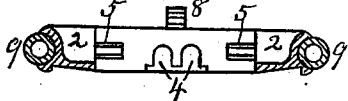


Fig. 9

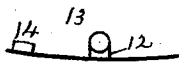


Fig. 10



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UNITED STATES PATENT OFFICE.

PETER L. BENNER, OF PHILADELPHIA, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 582,844, dated May 18, 1897.

Application filed November 21, 1895. Serial No. 569,696. (No model.)

To all whom it may concern:

Be it known that I, PETER L. BENNER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Fenders for Street-Railway Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making
10 part of this specification, in which—

Figure 1 is a side view of a street-car having my improved fender connected at each end of the car-truck. Fig. 2 is a top view of the fender and so much of the car-truck as will
15 show a connection. Fig. 3 is a longitudinal section of Fig. 2, taken on the dotted line X Y. Fig. 4 is a back view of the fender. Figs. 5, 6, 7, 9, and 10 are views of the pivoted and tilting cover. Fig. 8 is a cross-section of Fig.
20 2, taken on the dotted line O K of Fig. 2.

Similar numerals refer to similar parts throughout the several views.

The object of my invention is a car-fender that may be connected to the car-truck and
25 placed under the platform, or, if desired, connected to the body of the car and in front of the bumper.

The invention consists in a fender made pointed at the forward part, hung and pivoted in hangers connected to the car truck or
30 body, and having a divided and pivoted cover so arranged as to cast an object picked up into the center of the fender.

In the practice of my invention by applying the same to a street-car it is desirable to make the fender as light in weight as is consistent with strength. Therefore I prefer to cast the frame in iron and make the iron malleable by the well-known process.

40 The frame is represented by the numeral 2 and is shown in Figs. 2, 3, 4, and 8. The shape is that of a "locomotive-pilot." This frame at the rear is constructed with two pedestals 3 and at the front with two pedestals
45 4. Around the point and along the sides the frame is made half-round, as shown in Figs. 4 and 8, and to the inner sides of the frame are fixed studs 5. By means of these studs and the hangers 6 the fender is pivoted and hung to the cross-bar 7, which forms
50 a part of the car-truck.

8 is a shoe fixed under the forward point of the fender.

Around the point and on the outer sides of the frame 2 I fix a rubber air-cushion 9. 55

The top of the fender is covered by pivoted "shutters" 10, which shutters are made of sheet-iron and fixed to a bar 12. Said bar is journaled at 13 at each end. The shutters are made of a shape shown in Figs. 4, 5, 7, 9, and
60 10. At the corners 14 the shutters are weighted.

Between the fender and end of the car-truck I place a wire or rope screen 15. (See Figs. 1, 2, and 3.) This screen is fixed to the
65 end of the car-truck.

To the most forward ends of the car-body, known as the "bumper," I fix a rubber air-cushion 16. (See Fig. 1.)

The operation of my invention is apparent
70 from the above description of the construction when taken in connection with the drawings.

The fender, if placed as shown in Fig. 1 and connected to the car-truck, will not receive any seesaw motion from the body of the car, and the fender may be carried close to the ground. When an object is struck by the bumper, the air-cushion will break the impact of the blow, and should the object be
80 thrown down between the car-tracks the point of the fender when it strikes the object will be depressed, so as to cause the shoe 8 to slide on the ground, and if the object is directly in the front and middle of the tracks the fender
85 will scoop it up and throw it on the top of the fender and the pivoted shutters will close instantly, as shown by the dotted lines of Fig. 4. This prevents the object from rolling off. If the object strikes the side of the
90 fender, the air-cushion will break the impact of the blow, and the fender being taper will push the object off the track and away from the car-wheels.

The weight or center of gravity of the fender being in the rear of the studs 5, the fender will, when not struck, assume the position shown in Fig. 1. 95

The drawings show the fender as connected to the car-truck, but it is obvious the fender
100 may be connected to the car-body and carried in front of the bumper.

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

In a street-car fender, the combination of
5 a pivoted car-fender, and a divided cover,
each part of the cover being pivoted on trunnions, at each end, which trunnions, or jour-

nals, are supported and work in boxes, formed in the fender-frame, substantially as shown and described.

PETER L. BENNER.

Witnesses:

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