

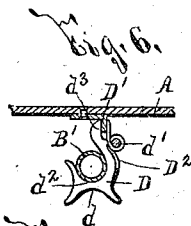
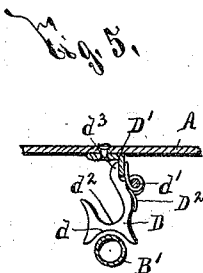
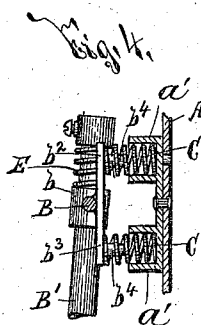
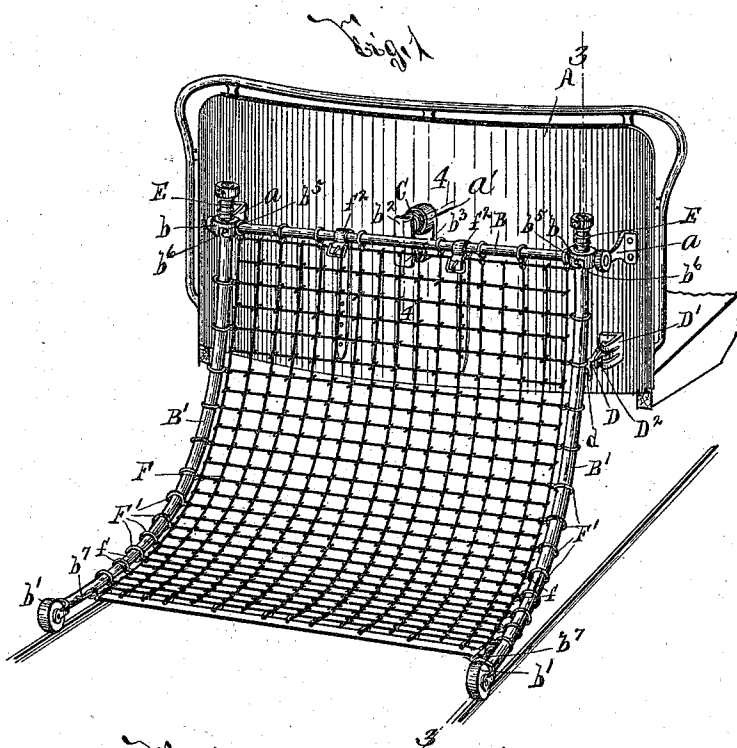
(No Model.)

2 Sheets—Sheet 1.

L. L. MINCER.
CAR FENDER.

No. 562,477.

Patented June 23, 1896.



WITNESSES:
W. C. Chase,
H. H. Theobald.

Louis L. Mincer INVENTOR

BY
Key & Parsons,
ATTORNEYS.

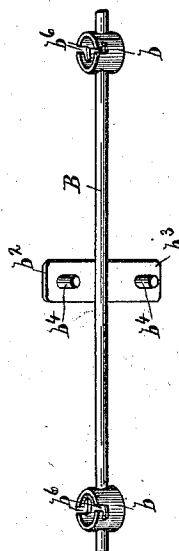
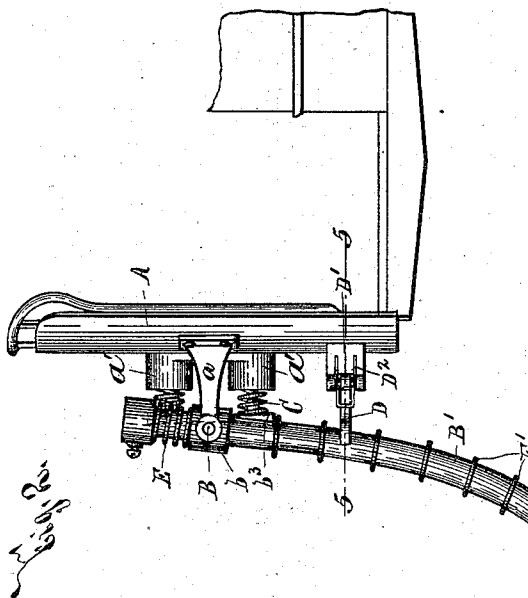
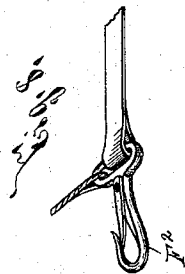
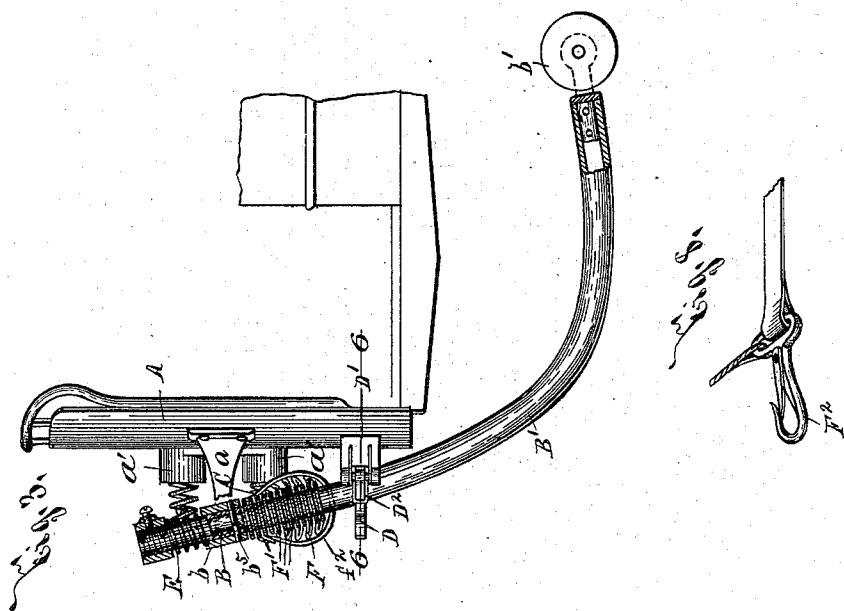
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2 Sheets—Sheet 2.

L. L. MINCER.
CAR FENDER.

No. 562,477.

Patented June 23, 1896.



WITNESSES:

H. C. Chase,
H. H. Theobald,

INVENTOR

Louis L. Mincer.

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

LOUIS L. MINCER, OF ROCHESTER, NEW YORK, ASSIGNOR OF THREE-FOURTHS
TO HENRY MICHAELS, R. SOBLE, AND SOL SAVAGE, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 562,477, dated June 23, 1896.

Application filed December 12, 1895. Serial No. 571,854. (No model.)

To all whom it may concern:

Be it known that I, LOUIS L. MINCER, of Rochester, in the county of Monroe, in the State of New York, have invented new and
5 useful Improvements in Car-Fenders, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in
10 car-fenders, and has for its object the production of a device which is particularly simple and attractive, and is of such construction that its advance end is maintained at a minimum distance above the road-bed, and may
15 be supported beneath the car when not in use; and to this end it consists, essentially, in the general construction and arrangement of the parts, all as hereinafter more particularly described, and pointed out in the claims.

20 In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figures 1 and 2 are, respectively, perspective and side elevations of the front end of a car and my improved fender attached thereto. Fig. 3 is a vertical section taken on line 3 3, Fig. 1, the car-fender being shown in its inoperative position. Fig. 4 is a detail vertical
25 section taken on line 4 4, Fig. 1. Figs. 5 and 6 are horizontal sections taken, respectively, on lines 5 5 and 6 6, Figs. 2 and 3. Fig. 7 is an inverted perspective of the top frame-bar of the fender, portions thereof being broken
30 away. Fig. 8 is a perspective of one of the detached snap-hooks attached to the ends of the front edge of the net, a portion of the front strap of the net being operatively engaged therewith; and Fig. 9 is a detached view
35 of one of the rings encircling the side bars of the fender-frame.

A is a car of any suitable construction, only a portion of which is here illustrated, and B B' B' are the transverse top and the upright
45 side bars of the frame of my car-fender, which is pivoted at its upper end to the car A, so that its front end is free to move up and down as the car tilts or rocks longitudinally. The opposite ends of the top bar B are preferably
50 journaled in suitable supports or arms a a, projecting from the car A, and are provided

with upright eyes b b for receiving the upper ends of the side bars B' B'. The lower ends of the side bars B' B' extend forwardly, Fig. 1, and their outer extremities are normally arranged in close proximity to the road-bed, and
55 journaled therein are wheels b' b', that rise and fall as the fender-frame rocks on the outer ends of the bar B, which form pivots therefor.

The fender-frame may be held in its operative position by any suitable means; but I preferably use two springs C C, which readily yield to permit rocking or pivotal movement of said frame. These springs are usually of spiral form, and are preferably interposed between the car A and arms b² b³, extending upwardly and downwardly from the bar B and fixed to its central portion. To prevent displacement of the springs C C, the car A is provided with sockets a' a' for receiving their
60 rear ends, and the arms b² b³ are formed with projections b⁴ for entering their front ends. The downward movement of the front end of the fender-frame may be limited by any suitable means, but I preferably use engaging
65 pieces D D, which are provided with concave stop-faces d d, and are normally arranged, as shown at Figs. 2 and 5, with said stop-faces in position to be engaged by the adjacent portions of the side bars B' B'.
70 75 80

My improved fender-frame is preferably so constructed that its advance end may be supported beneath the car when not in use, and to effect this result the upper ends of the side bars B' B' revolve or rock in the eyes b b, and are provided with laterally-extending shoulders b⁵, which engage shoulders b⁶, formed by right-angular grooves extending upwardly from the lower edges of said eyes, and hold the bars B' B' in their operative and inoperative positions. The shoulders b⁵ b⁶ are held in engagement by suitable means, as springs E E, encircling the upper ends of the side bars B' B' and having their lower ends engaged with the top faces of the eyes b b and their upper ends with collars or shoulders adjustably fixed to said bars B' B'. The engaging pieces D D, previously mentioned, are usually utilized for holding the bars B' B' in their inoperative position, as shown at Fig. 3, and are preferably pivoted at d' to supports or arms D', projecting from the car A. Said engag-
85 90 95 100

ing pieces are formed at their front ends with concave faces d^2 and at their rear ends with shoulders d^3 , and are connected to suitable springs D^2 . The faces d^2 are arranged nearer the car A than the faces d , previously mentioned. The shoulders d^3 engage the supports D' for limiting the movement of the engaging pieces inwardly toward each other, and the springs D^2 normally prevent the opposite rocking of said engaging pieces, and are free to yield when the side bars are changed from their operative to their inoperative position, or vice versa.

The net F of my fender may be of any desirable construction, and its opposite side edges are preferably secured to small eyes f , provided upon the inner sides of larger eyes F' , mounted on the bars $B' B'$ and movable lengthwise thereof. The opposite ends of the lower edge of the net F are provided with suitable means, as snap-hooks F^2 , for detachably engaging loops b^7 upon the inner sides of the front ends of the bars $B' B'$. When the fender is not in use, and before the advance ends of the bars $B' B'$ are arranged beneath the car A, the net is moved lengthwise of the bars $B' B'$ toward the bar B, and is held in this position by suitable means, as straps f^2 .

The operation of my invention will be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be particularly noted that its advance end may be maintained at a minimum distance above the road-bed, for the reason that the car-fender is free to rock on a pivot on its upper end as the car tips or rocks longitudinally, thus obviating any injury to the fender during such motion of the car. It is obvious, however, that the exact detail construction and arrangement of the parts of my car-fender may be somewhat varied without departing from the spirit of my invention, and consequently I do not herein specifically limit myself thereto.

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

1. In a car-fender, the combination of a frame pivoted to the car, springs for rocking the frame in opposite directions, and means secured to the car for limiting the downward movement of the advance end of the frame, substantially as and for the purpose specified.

2. In a car-fender, the combination of supports secured to the car, a frame provided with a transverse bar having its opposite ends journaled in the supports and rigid side bars projecting downwardly from the transverse bar and having forwardly-extending lower ends, springs for rocking the frame in opposite directions, and a net movable lengthwise of said side bars, substantially as and for the purpose described.

3. In a car-fender, the combination of a frame pivoted to the car and provided with rigid side bars having forwardly-extending

lower ends, springs for rocking the frame in opposite directions, a net movable lengthwise of said side bars, and provided at the opposite ends of its lower edge with means for detachably engaging the lower ends of said bars, substantially as and for the purpose specified.

4. In a car-fender, the combination of a frame pivoted to the car and provided with rigid side bars having forwardly-extending lower ends, springs for rocking the frame in opposite directions, eyes movable lengthwise of the side bars and having their inner sides provided with additional eyes, and a net movable lengthwise of said side bars and having its opposite side edges secured to the additional eyes, substantially as and for the purpose described.

5. In a car-fender, the combination of supports secured to the car, a frame provided with a transverse bar having its opposite ends journaled in the supports, said transverse bar being provided with upwardly and downwardly extending arms, and springs interposed between the arms and the car for rocking the frame in opposite directions, substantially as and for the purpose specified.

6. In a car-fender, the combination of a frame provided with eyes, and side bars having their upper ends journaled in the eyes, and means for holding the side bars in their operative position, substantially as and for the purpose described.

7. In a car-fender, the combination of a frame provided with eyes, formed with engaging shoulders, and side bars having their upper ends journaled in the eyes and formed with shoulders for engaging the former shoulders, and springs for normally holding said shoulders in engagement, substantially as and for the purpose specified.

8. In a car-fender, the combination of a frame provided with eyes, and side bars having their upper ends journaled in the eyes, and movable engaging pieces for holding the side bars in their inoperative position, substantially as and for the purpose set forth.

9. In a car-fender, the combination of supports secured to the car, a transverse top frame-bar having its opposite ends journaled in the supports and provided with eyes, side bars having their upper ends journaled in the eyes, and means for holding the frame in its operative position, substantially as and for the purpose described.

10. In a car-frame, the combination of supports secured to the car, a transverse top frame-bar having its opposite ends journaled in the supports and provided with eyes, and its central portion formed with upwardly and downwardly extending arms, side bars having their upper ends journaled in the eyes and provided with shoulders detachably engaged therewith for holding the side bars in their operative and inoperative positions, springs encircling the upper ends of the side bars for holding said shoulders in their nor-

mal position and springs interposed between said arms and the car for rocking the frame in opposite directions, substantially as and for the purpose set forth.

5 In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of

Onondaga, in the State of New York, this 5th day of December, 1895.

LOUIS L. MINCER.

Witnesses:

E. A. WEISBURG,
K. H. THEOBALD.