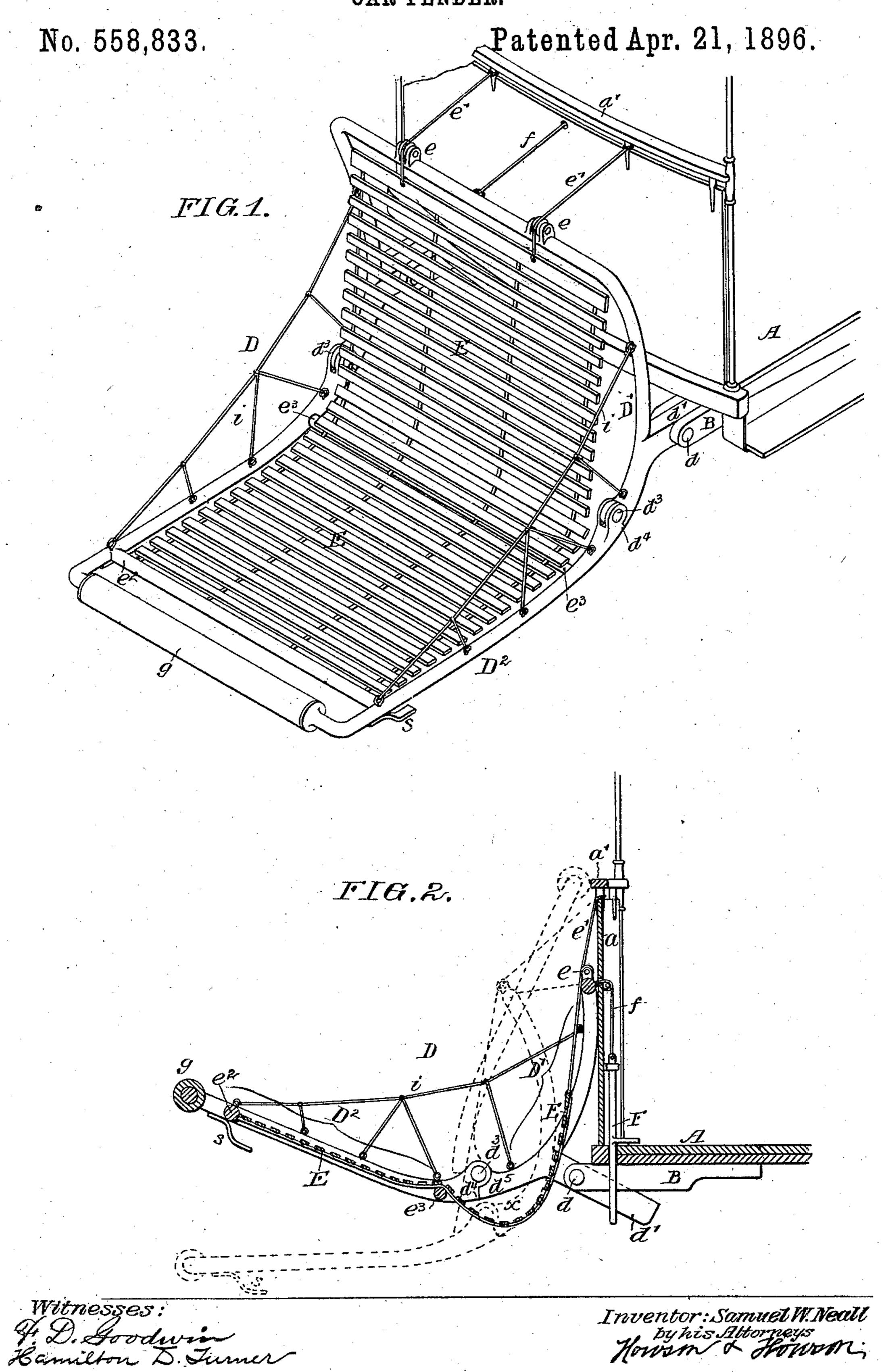
S. W. NEALL.
OAR FENDER.



## United States Patent Office.

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## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 558,833, dated April 21, 1896.

Application filed October 24, 1895. Serial No. 566,758. (No model.)

To all whom it may concern:

Be it known that I, Samuel W. Neall, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Car-Fenders, of which the

following is a specification.

My invention relates to certain improvements in car-fenders of the pick-up type; and the object of my invention is to so arrange the ro fender that it can be readily applied to a car, to so pivot it that when a person is caught a retaining-pocket will be formed, to so arrange the parts that the motorman can elevate the fender after the person is caught, preventing dislodgment, and to pivot the outer portion of the fender so that it will take up very little room when folded.

In the accompanying drawings, Figure 1 is a perspective view of my improved car-fen20 der. Fig. 2 is a sectional view of the fender, also showing a portion of the car in section.

A is the platform of the car having a dasher a and rail a'. Secured to the under side of the car are brackets B, to which the fender D is pivoted at d. The fender has extensions d' projecting beyond the pivots, which, when the fender is down, as shown in Fig. 1, rest under the platform, making a fixed stop for the fender, so that it will not drop onto the rails or the payement.

The fender consists of two sections, the inner section D' and the outer section D<sup>2</sup>. The outer section is pivoted to the inner section at  $d^3$ , so that it can be turned up against the dasher of the car, as shown by dotted lines in Fig. 2. The section D<sup>2</sup>, however, has a stop  $d^4$ , which strikes against a stop  $d^5$  on the section D', so that when it is lowered, as shown by full lines in Fig. 2, its movement will be

40 limited by the stops.

I preferably curve the arms of the inner fender, as shown in the drawings, and I provide pulleys e on the top bar of the fender, over which cords e' pass. These cords are secured at one end to the dasher and at the other end to the top rail of the slatwork E, the opposite end of this slatwork being attached to a bar  $e^2$  on the outer end of the section  $D^2$  of the fender.

• It will be understood that ordinary fabric netting may be substituted for the slatwork, if desired.

A bar  $e^3$  extends from one side to the other directly in front of the pivot, forming a rest for the slatwork, so that when a body is caught 55 by the fender it will roll into the pocket formed as the section D' is moved back from the position shown in Fig. 1 to that shown in Fig. 2.

If the body caught does not throw the section D' back, the entire fender can be tilted 60 by the motorman by simply placing his foot on the treadle F, which is guided in the platform and connected by a cord f to the upper

bar of the fender.

Beyond the bar  $e^2$  is a buffer-roll g, made of 65 suitable yielding material, preferably felt, covered with a yielding substance that will protect the felt, so that if the fender should strike a person it will yield to a certain extent and thus reduce the shock. Pads of 70 yielding material may be provided on other parts of the fender to reduce the shock, if necessary.

At each side of the fender are flexible cords *i*, suitably arranged to form guards. The section D<sup>2</sup> can be elevated by one of these cords or by a separate cord, and it can be held in its raised position by a suitable clip adapted to the rail or dasher of the car. Under the side bars of the section D<sup>2</sup>, near the front end, 80 are two spring-feet s s, which are so set as to be directly above the rails of the track, so that when a person is struck the fender will rest on these feet and not upon the pavement.

It will be understood that when the fender 85 is normally in the position shown by full lines in Fig. 1 and dotted lines in Fig. 2 it will be within a few inches of the track, so that if a person is struck by the fender he will be picked up and the momentum of the car will 90 only force him against the section D', which will yield sufficiently to form a pocket x, (shown in full lines in Fig. 2,) and this pocket will retain the person until the car is stopped, and in case a body is only caught by the front portion of the fender the motorman can place his foot on a treadle, lift the outer portion of the fender up, as shown in full lines in Fig. 2, and thus retain the body on the fender.

I claim as my invention—

1. The combination of a car, a fender pivoted thereto having a horizontal and vertical portion, a slat or webbing section secured to the outer end of the horizontal portion of the fen-

der and hung from the vertical portion but secured to the car-body so that when the fender is tilted the vertical portion will be moved backward allowing the vertical portion of the slat or webbing section to drop a certain distance to form a pocket, substantially as described.

2. The combination of a car, a fender pivoted thereto having a horizontal and vertical portion, a slat or webbing section secured to the horizontal portion of the fender and passing up over the vertical portion thereof and attached to the car-body so that when the fender is tilted a pocket will be formed by the slat or webbing section at the rear of the fender, substantially as described.

3. The combination in a car-fender, of the brackets on the car, the section D' pivoted thereto, the section D<sup>2</sup> pivoted to the section D' so as to be turned up, a buffer on the ex-

thereto, the section D<sup>\*</sup> pivoted to the section D' so as to be turned up, a buffer on the extreme end of the section D<sup>2</sup>, transverse bars  $e^2$ ,  $e^3$ , slatting or webbing secured to the bar

 $e^2$  passing over the bar  $e^3$  and connected by cords to the upper portion of the dasher of the car, said cords passing over the upper bar of 25 the fender, substantially as described.

4. The combination of a car, a fender pivoted thereto having a horizontal and vertical portion, a slat or webbing section secured to the outer end of the horizontal portion of the fender and hung from the vertical portion but secured to the car-body, a treadle connected to the vertical portion of the fender so that the operator can elevate the outer portion thereof to retain the body in the pocket formed 35 by the slat or webbing section, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL W. NEALL.

Witnesses:

WILL. A. BARR, Jos. H. KLEIN.