(No Model.)

H. HIESTAND.

CAR FENDER.

No. 547,992. Patented Oct. 15, 1895.

Fig. 1.

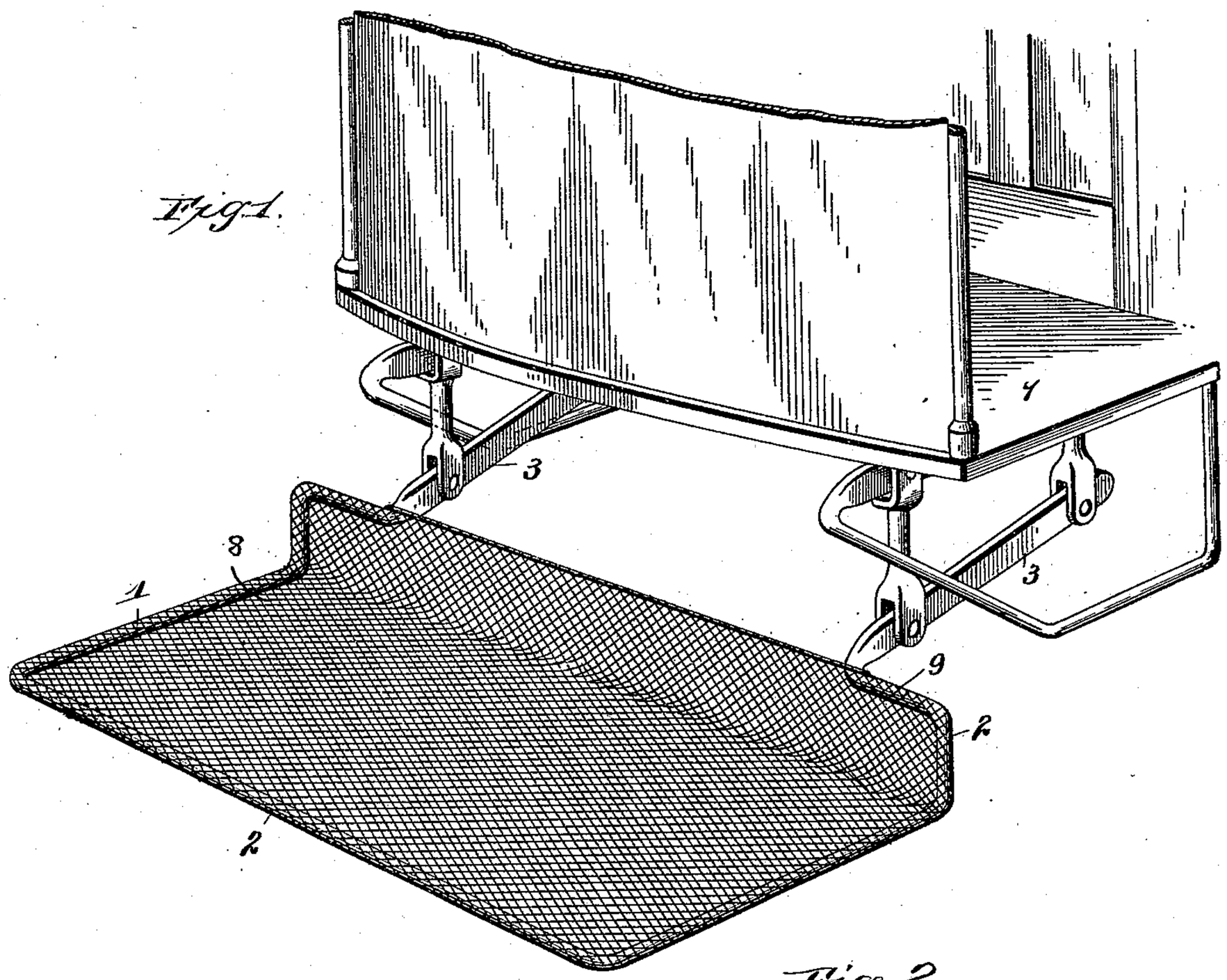
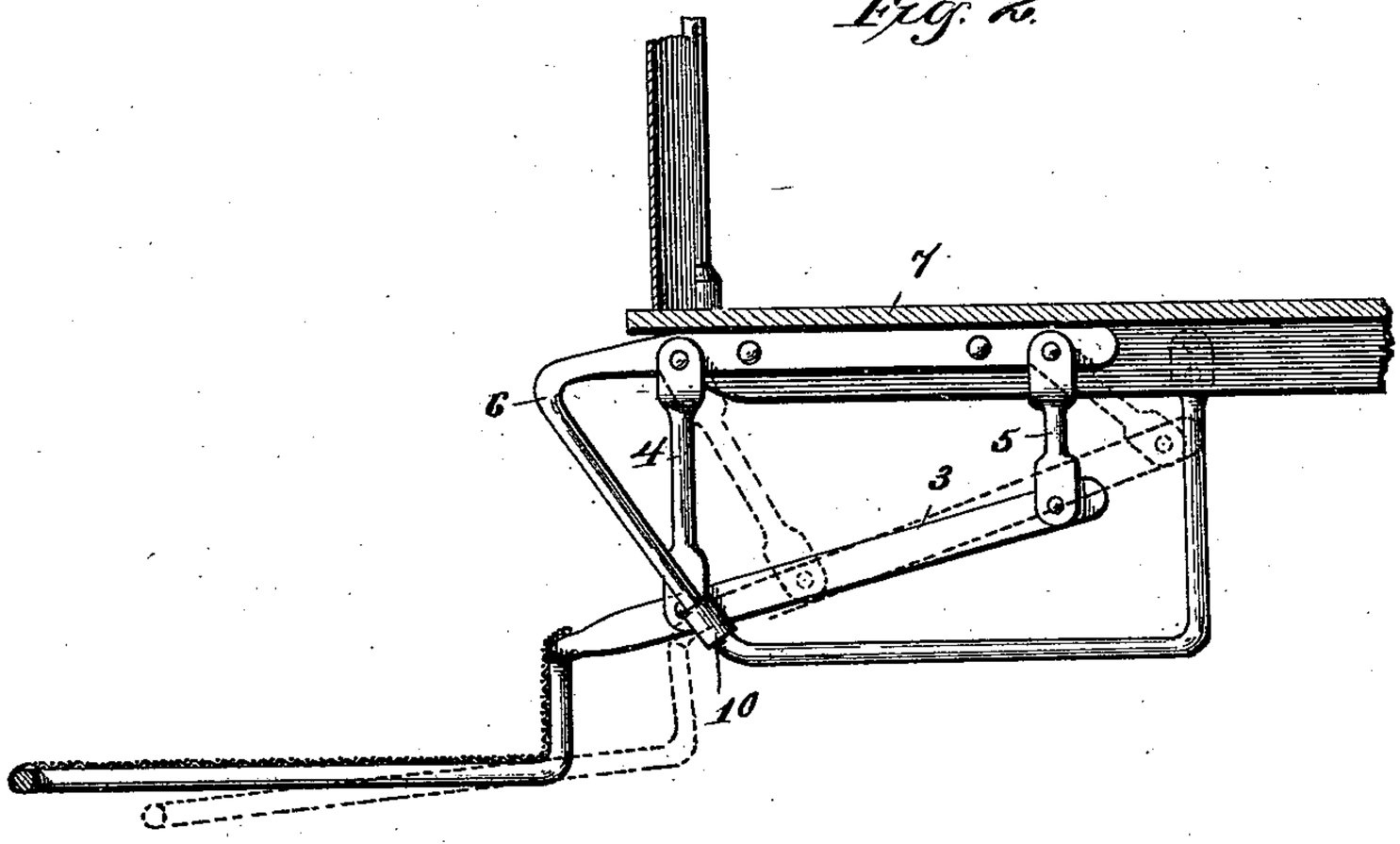


Fig. 2.



Witnesses
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CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 547,992, dated October 15, 1895.

Application filed May 8, 1895. Serial No. 548,473. (No model.)

To all whom it may concern:

Be it known that I, HENRY HIESTAND, 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 Car-Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in car-fenders, and has for its object to provide such a device adapted to be carried in front of the car, which, upon coming in contact with a person, will automatically yield and move backward and downward, whereby said person will be picked up and carried upon said fender until the car can be stopped; and with this end in view it consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by number to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective of the front end of a car with my improved fender attached thereto; and Fig. 2, a sectional elevation showing the fender in its normal position and in dotted lines, the position assumed when depressed.

Similar numbers denote like parts in both the views of the drawings.

1 is a rectangular frame formed by the rod 2, which is bent upward and rearward, terminating in the extensions 3.

4 and 5 are links, the lower ends of which are pivoted to the extensions 3 and their upper ends pivoted to the horizontal member of the bracket 6. This bracket is in turn bolted to the frame of the car 7. The links 4 are of greater length than the links 5, and therefore swing in an arc of larger radius than the latter, for the purpose presently explained.

The frame 1 is preferably covered with wire-netting 8, which may extend any desired distance upward at the rear of said frame.

From this description the operation of my improved fender will obviously be as follows: Should the outer edge of a fender carried by a car moving along the track come in contact with a person, instead of striking such person a rigid blow it will move backward by the swinging of the links 4 and 5, and since the links 5 describe an arc of smaller radius than the links 4 the inner ends of the extensions 3 will be carried upward faster than that portion of said extensions to which the links 4 are attached, thereby causing the front end of the fender to move downward in close proximity to or in contact with the rails or bed of the track. It will then be seen that upon any further forward movement of the car the person struck will be thrown upon the fender, where he will safely lie and be carried until the car is stopped. To limit the backward movement of the fender, I extend the bracket 6 downward, so that the shoulders 9, formed by the bending of the rod 2, will come in contact with said bracket or rubber buffers 10 placed thereon.

By the use of my improvement a fender is provided the weight of which is supported upon swinging links, thus obviating the necessity of using springs or other contrivances for keeping the fender in a normal position, and at the same time permitting the fender to move backward and downward with a greater degree of sensitiveness than is possible in fenders of any other construction, and since the fender moves backward, upon coming in contact with an obstruction, it follows that a person struck by said fender will not be injured by the blow and will only receive such injuries as are instant upon their precipitation upon the wire-netting.

It will be understood that the fender may be placed at either end of the car or may be removed in coupling said car to another; also, it will be understood that the bracket to which the links are pivoted may be arranged to be secured to the trucks of certain kinds of cars.

It is obvious that my improved fender may be varied in form and adaptation without departing from the spirit of my invention, which rests in the broad idea of suspending a frame by swinging links, in order that the weight of said frame may cause it to assume

a normal position and yet be permitted to move backward and downward upon coming in contact with an obstruction.

Having thus fully described my invention, what I claim as new and useful is—

In a car fender, the combination of the right angular frame 2 bent so as to form shoulders 9 and extensions 3, brackets 6 having buffers 10 for limiting the backward motion of said frame by abutting the shoulders 9, and links connecting the extensions 3 to said frame, as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

HENRY HIESTAND.

Witnesses:
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