(No Model.)

F. B. SCAIFE.

CAR FENDER.

No. 551,197. Patented Dec. 10, 1895.

Fig. 1.

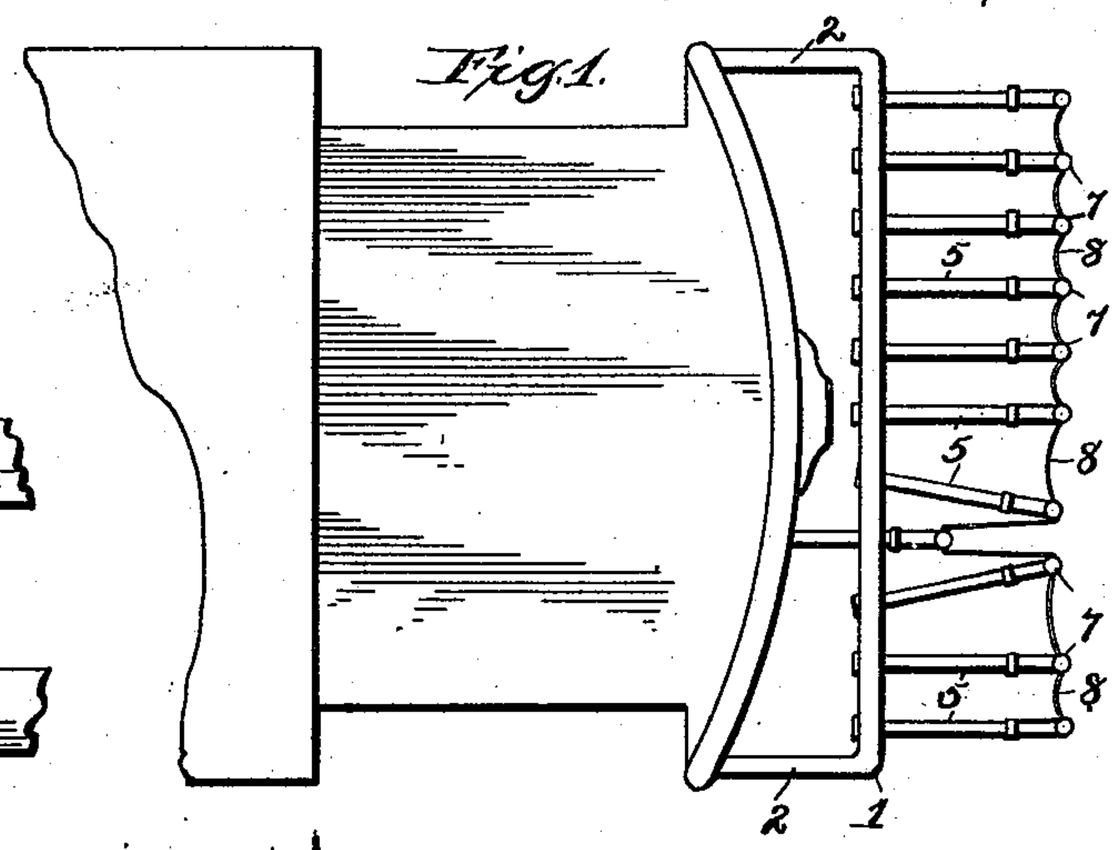


Fig. 4.

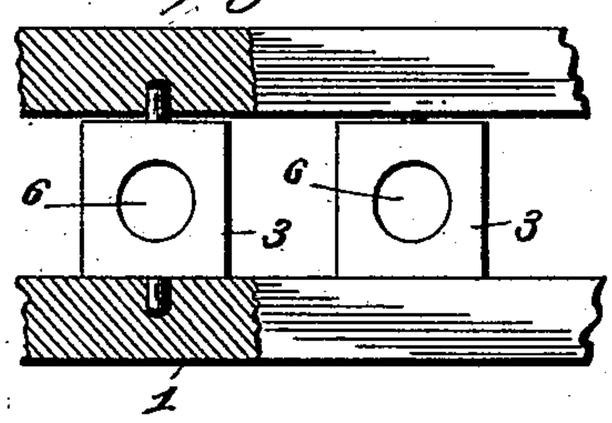


Fig. 2.

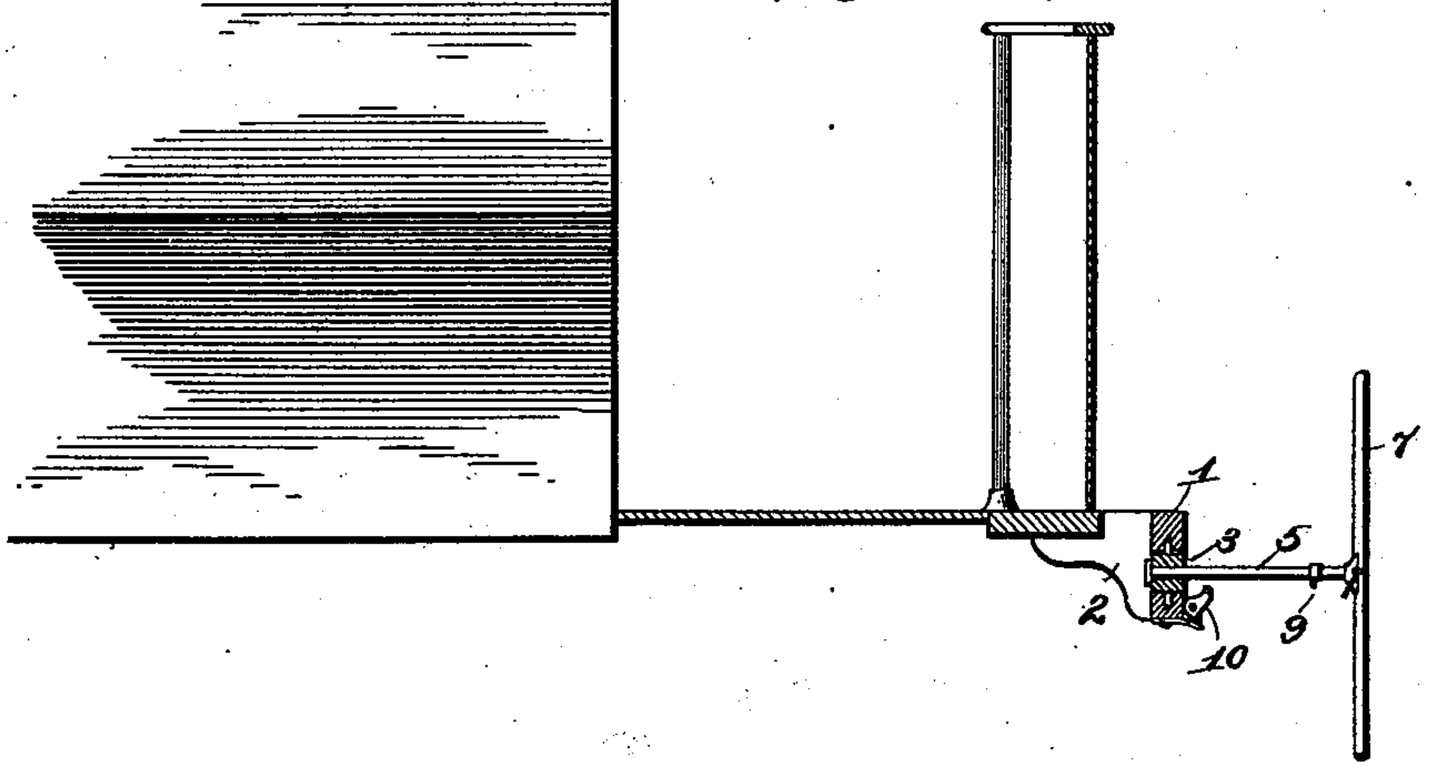
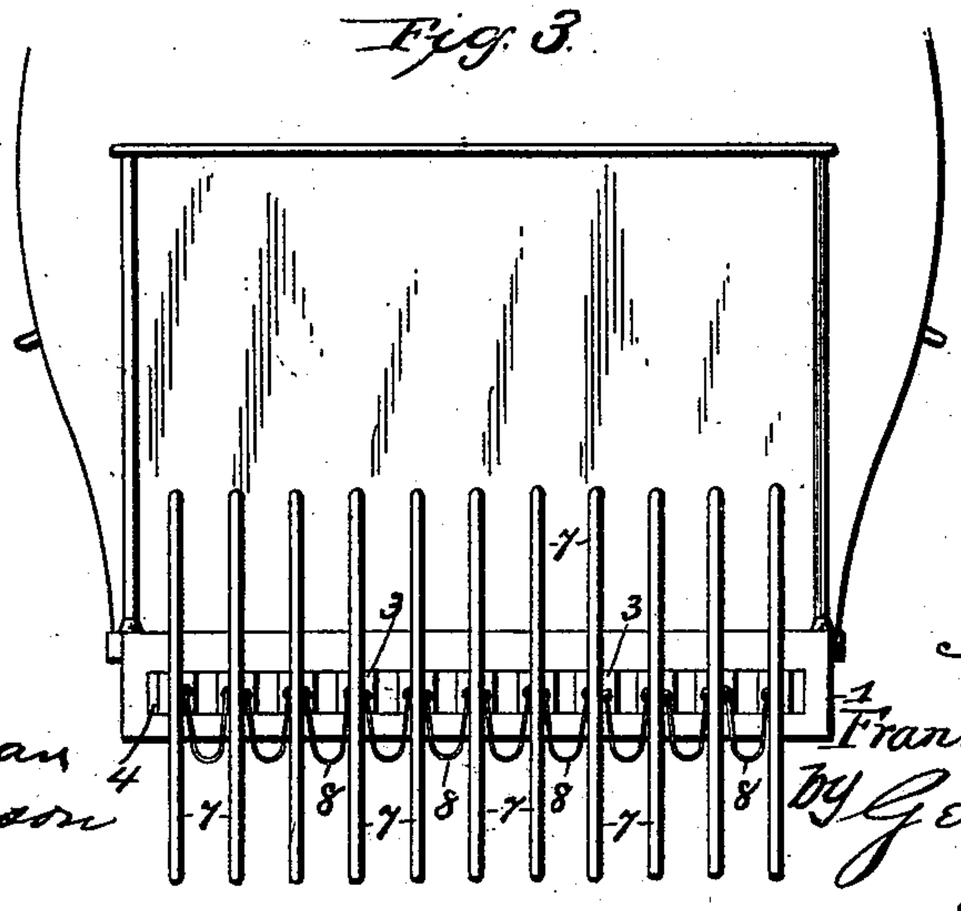


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

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CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 551,197, dated December 10, 1895.

Application filed September 4, 1895. Serial No. 561,462. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. SCAIFE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, 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 that will grasp and hold a person with whom it comes in contact, without thrusting them upon the track, and safely carry them in an upright position until the car can be stopped; and with this end in view my invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

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 plan view of one end of a car having my improved device attached thereto; Fig. 2, a section of the same, showing the method by which the members of the pick-up device are secured to their frame; Fig. 3, a front elevation of the device and the end of a car, and Fig. 4 an enlarged detail of one of the blocks pivoted within the cross-bar.

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

1 represents a cross-bar, secured by means of brackets 2 to the front end of the car, and 3 are blocks pivoted within the slot 4 and extending lengthwise of this bar, so as to have a rocking movement.

5 are arms which are adapted to slide in the holes 6 in the blocks 3, and may be held distended to the position shown in the drawings by suitable springs. To the outer ends of these arms are secured upright fingers 7, which extend within close proximity to the road-bed and are perfectly covered with some soft material, such as rubber. These fingers are connected together by chains 8, which normally hang in loops, as shown in Fig. 3, and for the purpose hereinafter set forth.

9 are a number of toes secured to the arms 5, and 10 are dogs pivoted to the cross-bar in the field of travel of the toes 9 when they move backward with their respective arms, and these toes and dogs are so arranged as to engage each other upon the backward movement of the former, whereby the arms will be retained in this retracted position. Thus it will be seen that should a car carrying my improved fender come in contact with a person, such person would not be thrown upon the track and passed over by the car, but would be wedged between two of the fingers, the one with which said person came directly in contact passing backward against the resiliency of its spring, as is shown in Fig. 1, and this movement would draw taut the chains connecting these fingers with the two adjoining fingers, and when this movement had been carried to such an extent as to pull with sufficient force upon these adjoining fingers they would close in upon the person, thus securely holding such person in an upright position until the car could be stopped and the person released. When one of the fingers is thrust backward, as just described, against the resiliency of its spring, the toe carried by the arm of such finger will be engaged by the dog 10, and held in its retracted position, so that a person struck will not be thrust forward after having once been caught. The sidewise movement of the two adjacent fingers is permitted by the swinging of their blocks 3 upon their pivots, as above described, and this sidewise movement may be limited by suitable stops, so that the fingers will not be permitted to swing past certain limits.

In fenders as now constructed a great disadvantage is met with in that a person must first be thrown down before they can be picked up, and, as is usual, this first effect upon a person of the fender produces the most serious results, and further, should the person not fall directly upon the fender when struck thereby, but fall upon the track in such a position that the fender should pass over him, the liability of injury by the car would be increased over a car using no fender at all, as the person would be pinioned down and unable to move; but by the use of my improvement such results cannot take place, as the first effect of the fender is to grasp and hold the person in the position in which they are

struck, and the only injury that could possibly come to such person would be that incurred by the dragging of their feet upon the road-bed, which would of necessity be very slight.

I am aware that slight modifications might be made in the exact construction here shown, but I do not wish to be limited to these details of construction, as the gist of my invention rests in the broad idea of grasping a person without disturbing the normally upright position.

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

1. In combination with a car, a cross bar, secured to one end thereof, having a series of arms pivoted thereto, said arms carrying vertical fingers at their outer ends, means for connecting said fingers, whereby when one is struck and forced backward, the two adjacent fingers are caused to close forward, substantially as shown and described.

2. In a device of the character described, the cross bar 1, secured to one end of the car, blocks 3, pivoted within a suitable slot in said cross bar, arms 5, adapted to slide within said blocks, fingers 7, secured to the outer ends of said arms, chains 8, for connecting said fingers, toes 9, and dogs 10, to engage said toes when the latter are pushed backward, substantially as shown and for the purpose set forth.

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

FRANK B. SCAIFE.

Witnesses:
S. S. WILLIAMSON,
SAMUEL L. TAYLOR.