No. 812,022.

PATENTED FEB. 6, 1906.

L. A. DEVIN & F. S. ATKINS.

CAR FENDER AND BRAKE.

APPLICATION FILED NOV. 6, 1905.

Fig. 1.

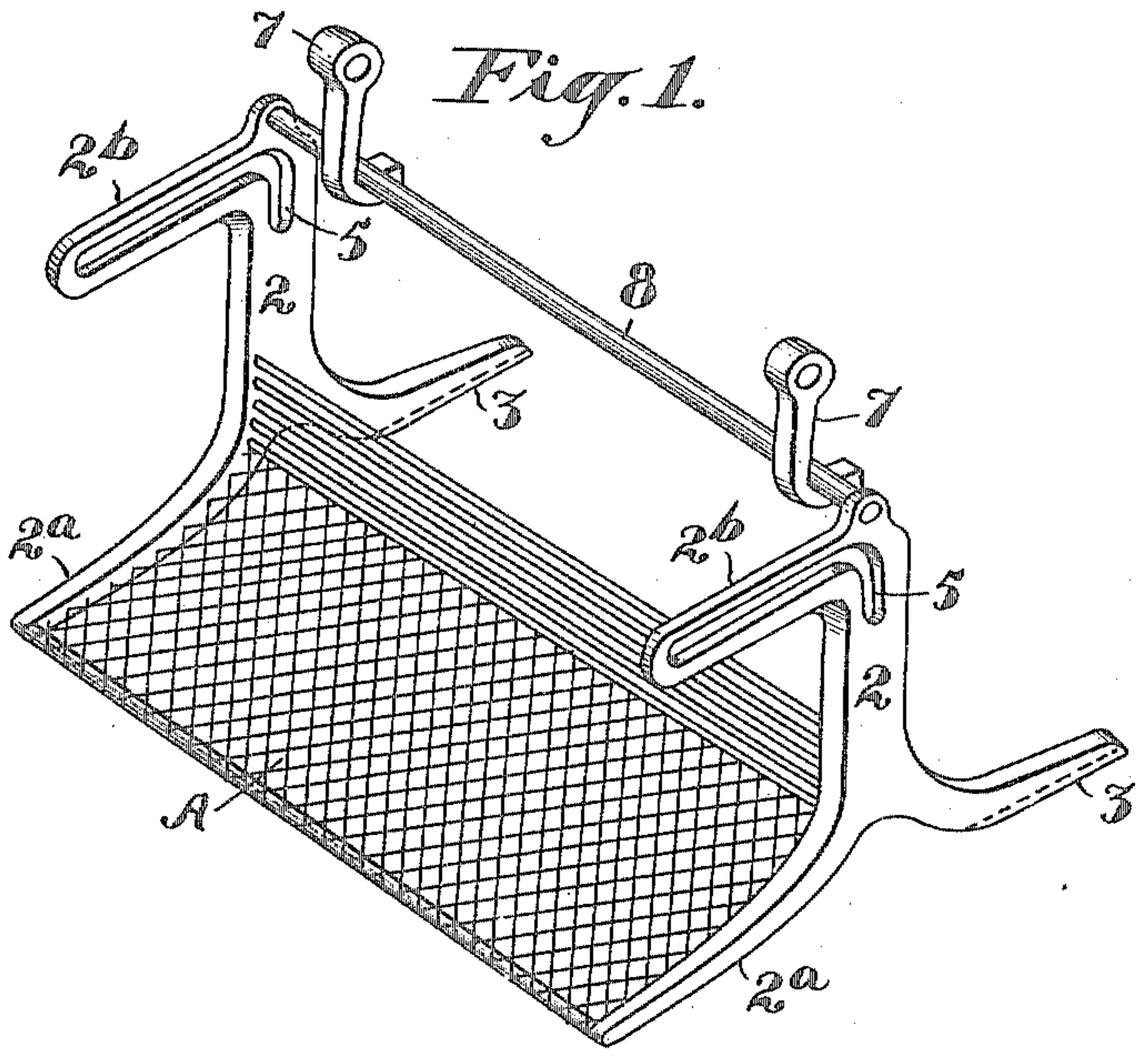
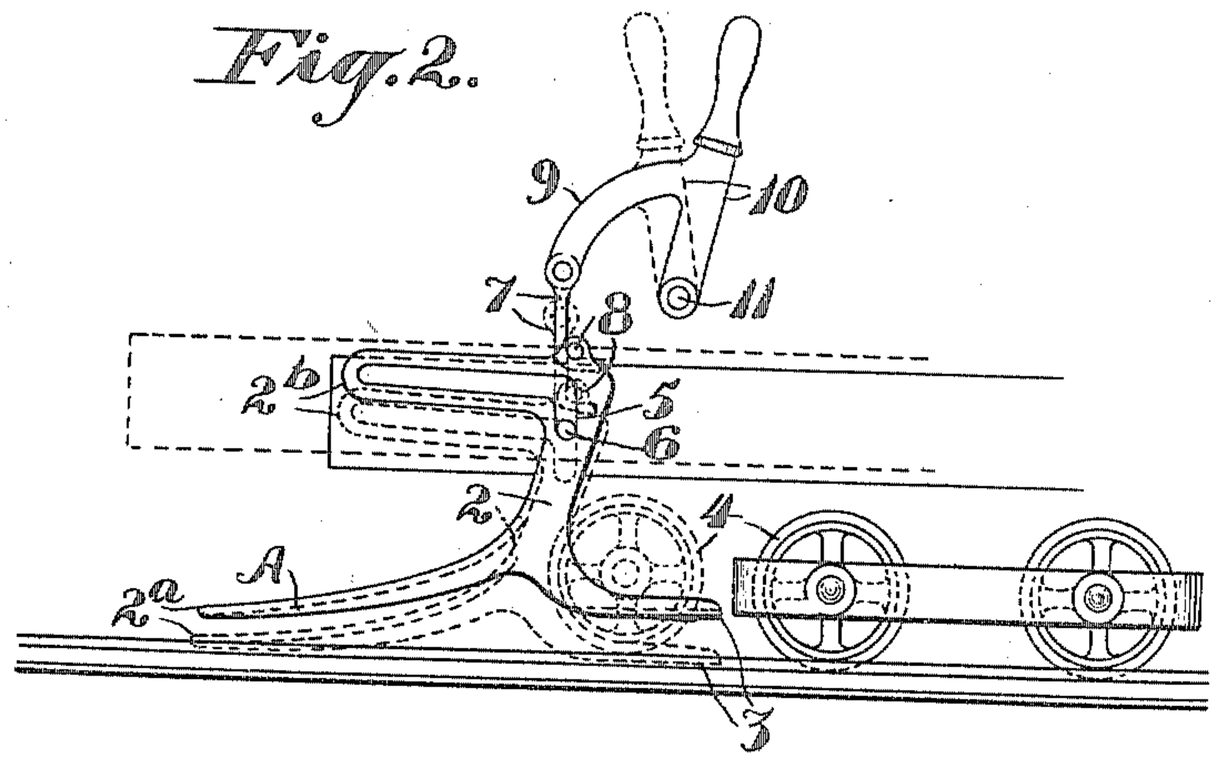


Fig. 2.



Witnesses:-
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UNITED STATES PATENT OFFICE.

LEE A. DEVIN, OF SAN FRANCISCO, AND FRANK S. ATKINS, OF OAKLAND, CALIFORNIA.

CAR FENDER AND BRAKE.

No. 812,022. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed November 6, 1905. Serial No. 285,989.

To all whom it may concern:

Be it known that we, LEE A. DEVIN, of the city and county of San Francisco, and FRANK S. ATKINS, of the city of Oakland, county of Alameda, State of California, citizens of the United States, have invented new and useful Improvements in Car Fenders and Brakes, of which the following is a specification.

Our invention relates to a device which is designed for application to street-railway and other cars or vehicles to prevent injury to persons and to furnish an emergency-brake.

It consists in the combination of parts and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 shows my car fender and brake. Fig. 2 is a side view of same, illustrating its two positions.

As shown in the drawings, A is a flexible apron or basket of any suitable construction supported from the front of the car by means of supporting-frames, upon which it is stretched so as to extend outwardly and in close proximity to the rails, thus acting as a fender to pick up any person or thing which may be deposited in the front of the car.

The fender is stretched upon the arms 2^a, which extend forwardly from the lower part of vertical portions 2, which extend upwardly and are so constructed as to be suspended from the sides of the car, the apron extending across the front between the arms 2^a. From the lower part of the standards 2 arms 3 extend rearwardly in line with the track upon which the car-wheels 4 travel. These arms may be grooved or flanged, so that when depressed they will always register with the track. From the upper part of the standards 2 arms 2^b extend forwardly and have horizontal slots made in them. These slots connect with vertical slots made in the upper part of the portion 2, as shown at 5, so that the horizontal and vertical slots unite at a substantially right angle. Pins 6, fixed in the side timbers of the car, project into these slots, so that the frame 2 may be raised or depressed with relation to these pins and also allowed to slide horizontally a distance equal to the length of the horizontal slots.

The device is suspended by means of hook-shaped or equivalent links 7, which engage with a transverse bar 8, said bar uniting the upper ends of the part 2, as plainly shown in Fig. 1. The upper ends of the links 7 are connected with arms 9, which project forwardly from a lever 10, which is fulcrumed, as shown at 11, so that by swinging the lever about its fulcrum-point the apron may be dropped close to the track or raised away from it, as shown in Fig. 2. Thus constructed the apron serves as a safety-guard and always runs near enough to the track to pick up any person or object which may accidentally fall in front of the car.

If it is desired to use the apparatus as a supplemental brake, the lever 10 will be thrown forward by the motorman, and through the arm 9 and the suspending-links the device will be dropped downwardly until it rests upon the track, the vertical portion of the slot 5 moving upon the guide-pins 6 until said pins are in line with the horizontal portion of the slot. At this time the lower arms of the frame 2 will rest upon the track, the arms 3 extending rearwardly, as shown, and the friction thus produced will cause the device to slide backwardly upon the pins 6, which move in the horizontal portion of the slot, and this action brings the rear ends of the track-arms beneath the front wheels 4 of the car, so that these wheels will ride up on the extension 3, and thus bringing the weight of the car upon the extensions or shoes 3 will act as a powerful brake to check the motion of the car.

When it is desired to again raise the apparatus to its normal position, the car may be backed until the pins 6 are brought into line with the vertical portion of the slots 5, and by pulling back upon the lever 10 the device may be raised, the vertical portions of the slots traveling upon the pins 6, as previously described.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination with a car having projections on its sides, of an emergency-brake comprising a frame having rearwardly-extending shoes adapted to contact with the track-rails said frame slidably guided by said projections, and mechanism by which said frame may be moved to project the shoes beneath the wheels of the car.

2. The combination with a car having projections on its sides, of a protective device comprising a fender and emergency-brake said brake including side frames and means for suspending them from the car, said frames having substantially horizontal channels receiving said car projections, and having, also,

rearwardly-extending track-shoes, and a lever and connections by which the fender and brake may be moved substantially horizontally, and the track-shoes projected beneath the wheels of the car.

3. In a car fender and brake, side frames having front fender-supporting extensions and rearwardly-extending track-shoes, and slotted suspending-arms at the top, fixed pins extending into the slots, hangers and a lever connected therewith by which to raise and lower and move the fender horizontally.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

LEE A. DEVIN.
FRANK S. ATKINS.

Witnesses:
W. H. H. GENTRY,
W. H. KRONING.