(No Model.)

D. WILLIAMSON.

CAR FENDER.

No. 564,266. Patented July 21, 1896.

Fig. 1.

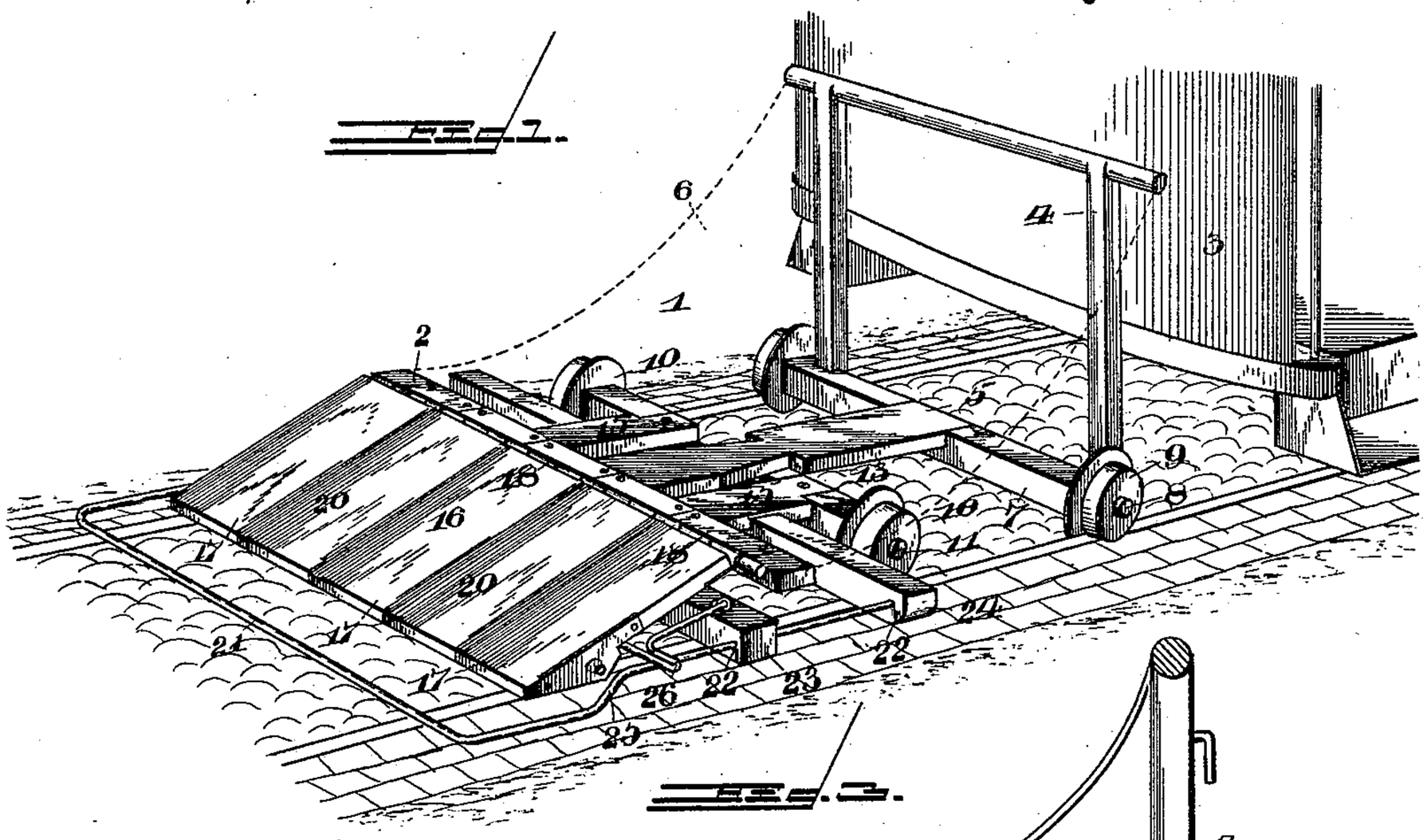

Fig. 3.

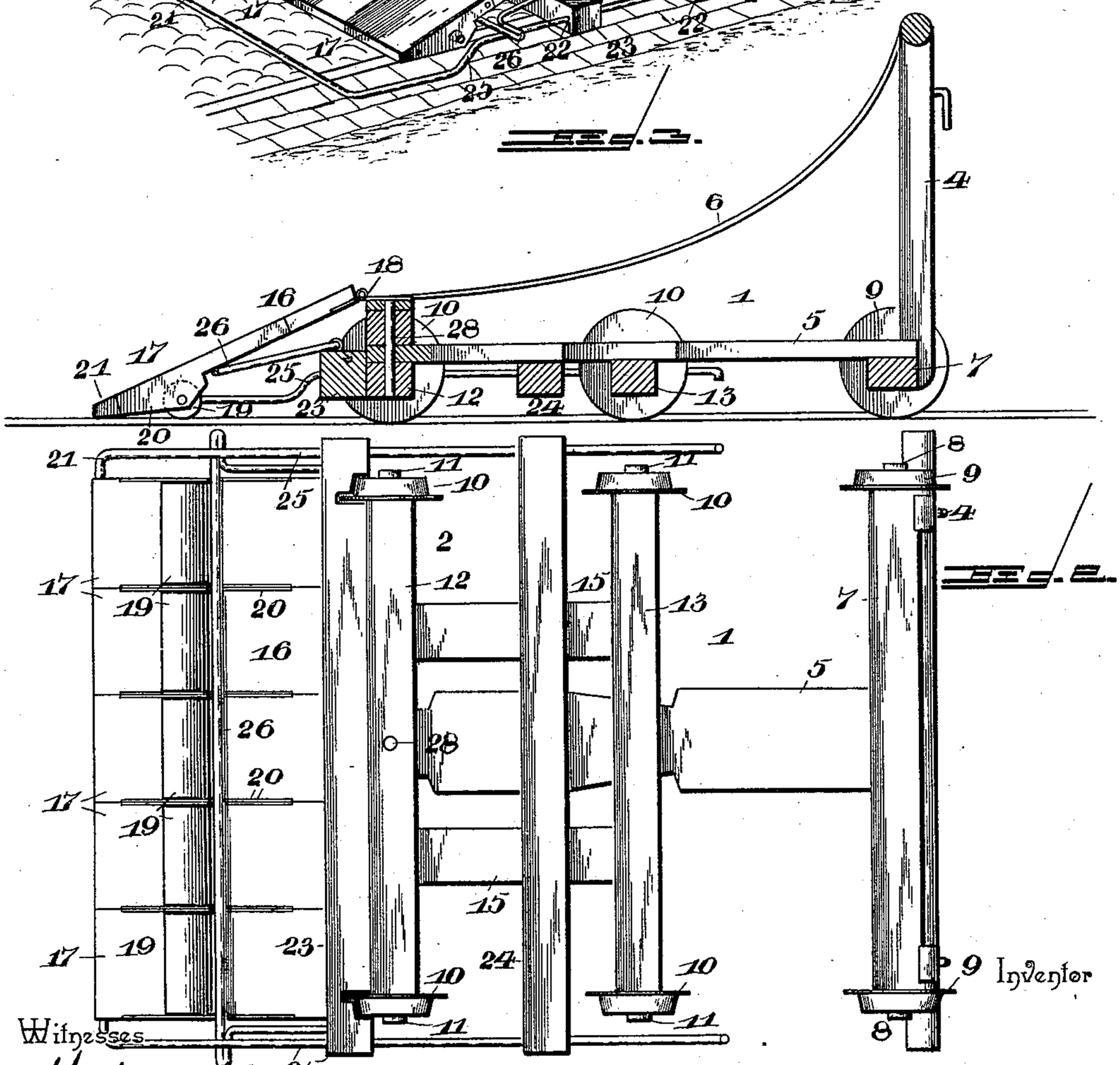

Fig. 2.

Witnesses

H. T. Doyle

T. J. J. Riley

Inventor

By his Attorneys, Daniel Williamson

Church & Co.

UNITED STATES PATENT OFFICE.

DANIEL WILLIAMSON, OF SUNBURY, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO J. SLAYMAKER AND L. T. ROHRBACH, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 564,266, dated July 21, 1896.

Application filed March 12, 1896. Serial No. 582,936. (No model.)

To all whom it may concern:

Be it known that I, DANIEL WILLIAMSON, a citizen of the United States, residing at Sunbury, in the county of Northumberland and State of Pennsylvania, have invented a new and useful Car-Fender, of which the following is a specification.

The invention relates to improvements in car-fenders.

The object of the present invention is to improve the construction of car-fenders, and to provide a simple, inexpensive, and efficient one adapted to be readily applied to street-railway and other cars and capable of automatically setting itself in a position close to the road-bed to prevent a person or other object from passing beneath it and being injured.

A further object of the invention is to provide a car-fender which will be arranged normally a sufficient distance above the road-bed to pass readily over the same, and which will be swung downward by any obstruction between the rails.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a car-fender constructed in accordance with this invention. Fig. 2 is a reverse plan view of the same. Fig. 3 is a central longitudinal sectional view.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a fender-frame comprising a front truck 2, located in advance of a car 3, and a vertically-disposed substantially rectangular net-support 4, suitably secured to the front of a car at the dashboard thereof, and connected with the truck 2 by a horizontally-disposed centrally-arranged reach-bar 5, rigidly secured at its rear end to the bottom of the rectangular net-support 4 and pivotally connected at its front end to the front of the truck 2 and having a limited play to permit the truck to turn in passing around a curve. An inclined net 6 is arranged on the fender-frame and is secured to the top of the rectangular support 4 at its back, and it has its front edge fastened to the front of the truck.

The bottom bar 7 of the rectangular net-support is provided at its ends with journals 8, on which are arranged wheels 9, adapted to run on the track. The truck 2 is provided at opposite sides with wheels 10, arranged on journals 11 of front and rear bars or axles 12 and 13, and the front and rear bars or axles 12 and 13 are rigidly connected by longitudinally-disposed bars 15, between which the reach-bar 5 moves.

The fender is provided with an inclined hingedly-mounted front 16, adapted to trip a person and cause him to fall within the net. The front 16 is composed of a series of independent sections 17, hinged at their tops to the front of the truck at 18, and provided at their lower faces a short distance from their front ends with rollers 19, journaled in bearing-openings of side plates 20, and the rollers may be provided with integral journals or be arranged on suitable spindles.

The front of the fender is normally arranged above the road-bed, as illustrated in Fig. 1 of the accompanying drawings, and it is supported by a reciprocating frame 21, adapted, when it comes in contact with a person or other object, to move inward and cause the front of the frame to drop close to the track to prevent a person or other object from getting beneath it.

The reciprocating frame is substantially rectangular, consisting of a transverse front portion and parallel sides, which are arranged in guide-openings 22 of bars 23 and 24 of the truck, and the sides of the reciprocating frame are provided at points intermediate of their ends with inclined angular bends 25, offsetting downwardly the front portion of the reciprocating frame and arranging the said front portion in a lower plane than the rear portion. The inclined front of the car-fender is supported on the sides of the reciprocating frame by means of a substantially rectangular frame 26, hinged to the front of the truck, arranged beneath the sections and consisting of a transverse front portion and longitudinally-disposed arms. The transverse front portion extends later-

ally from the hinged frame and rests upon the sides of the reciprocating frame, and when the latter is drawn outward, as illustrated in Fig. 1 of the accompanying drawings, the sections which rest upon the hinged frame are supported in an elevated position by reason of the hinged frame 26 resting upon the rear portions of the sides of the reciprocating frame. When the reciprocating frame is moved inward, the laterally-extending portions of the hinged frame 26 slide down the inclined bends 25 and rest upon the lower front portion of the reciprocating frame, whereby the hinged front 16 of the car-fender is lowered sufficiently to cause the rollers of the sections 17 to run on the road-bed. When the rollers of the sections are arranged on the road-bed, it is absolutely impossible for a person or any other object to get beneath the fender-frame, and the movement of the car forces a person or other object up the inclined front 16 into the net.

The bar or axle 13 and the bar 24 are recessed between the longitudinally-disposed bars 15 to bring the upper face of the reach-bar 25 substantially flush with the upper faces of the bars of the truck-frame, and the bars 15 operate as stops to limit the swing of the truck-frame. The bar or axle 12 at the front of the truck-frame is provided with a mortise or opening, in which the front end of the reach-bar 5 is secured by a vertical pivot 28.

It will be seen that the car-fender is simple and comparatively inexpensive in construction, that it is adapted to be readily applied to street-railway cars, and that it is capable of catching a person and of preventing him from getting under it.

It will also be apparent that the hinged front of the car-fender is normally held above the road-bed and that as soon as a person or other object contacts with the reciprocating frame the said hinged front will be lowered to the road-bed, and that as it is composed of separate independently-hinged sections, each provided with a roller, they are adapted to conform automatically to any inequality of a road-bed.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a car-fender, the combination of a frame, an inclined front hinged to the frame and composed of a series of independently-movable sections, and a longitudinally-disposed reciprocating frame located beneath and supporting the sections a sufficient distance above the track to clear the same, said frame extending in advance of the hinged front and adapted to be engaged and moved rearward by a person or other object to withdraw the support from the hinged front and cause the latter to drop upon the track, substantially as described.

2. In a car-fender, the combination of a frame, an inclined front hinged to the frame, a reciprocating frame slidingly mounted on the fender, extending outward in advance of the same and provided with an upper rear portion and lower front portion, and means for supporting the hinged front on the reciprocating frame, whereby, when the latter is moved rearward the inclined front will be lowered, substantially as described.

3. In a car-fender, the combination of a frame, an inclined front hinged to the frame and composed of a series of independently-movable sections, a reciprocating frame slidingly mounted on the fender-frame, extending outward in advance of the inclined front and provided with an upper rear portion and a lower front portion, whereby when the reciprocating frame is moved rearward the inclined front will be lowered, and means cooperating with the reciprocating frame for supporting the said sections, substantially as described.

4. In a car-fender, the combination of a fender-frame, an inclined front hinged to the fender-frame and composed of a series of independently-movable sections, a hinged frame mounted on the fender-frame and supporting the sections, and a reciprocating rectangular frame slidingly mounted on the fender-frame and extending in advance of the inclined front, and provided at its sides with inclined bends downwardly offsetting the front portion of the frame, said sides being arranged beneath and supporting the hinged frame, whereby when the reciprocating frame is drawn outward, the sections will be raised, and when moved inward the sections will be lowered, substantially as and for the purpose described.

5. In a car-fender, the combination of a fender-frame comprising a truck provided with wheels arranged to run on a track, a vertically-disposed net-support designed to be secured to a car and provided at its bottom with wheels and a reach rigidly secured to the bottom of the net-support and pivoted to the truck, the latter being capable of a limited pivotal movement, a net secured to the top of the net-support and to the front of the truck, a series of independently-movable sections arranged at an inclination and hinged to the front of the truck, a reciprocating rectangular frame slidingly mounted on the truck and consisting of a lower front portion and an upper rear portion, and a hinged frame mounted on the truck and supporting the sections and resting upon the reciprocating frame, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL WILLIAMSON.

Witnesses:

GEO. B. CADWALLADER,

J. C. IRWIN.