

A. DOSS.
CAR FENDER.

APPLICATION FILED MAR. 19, 1908.

916,540.

Patented Mar. 30, 1909.

SHEETS-SHEET 1.

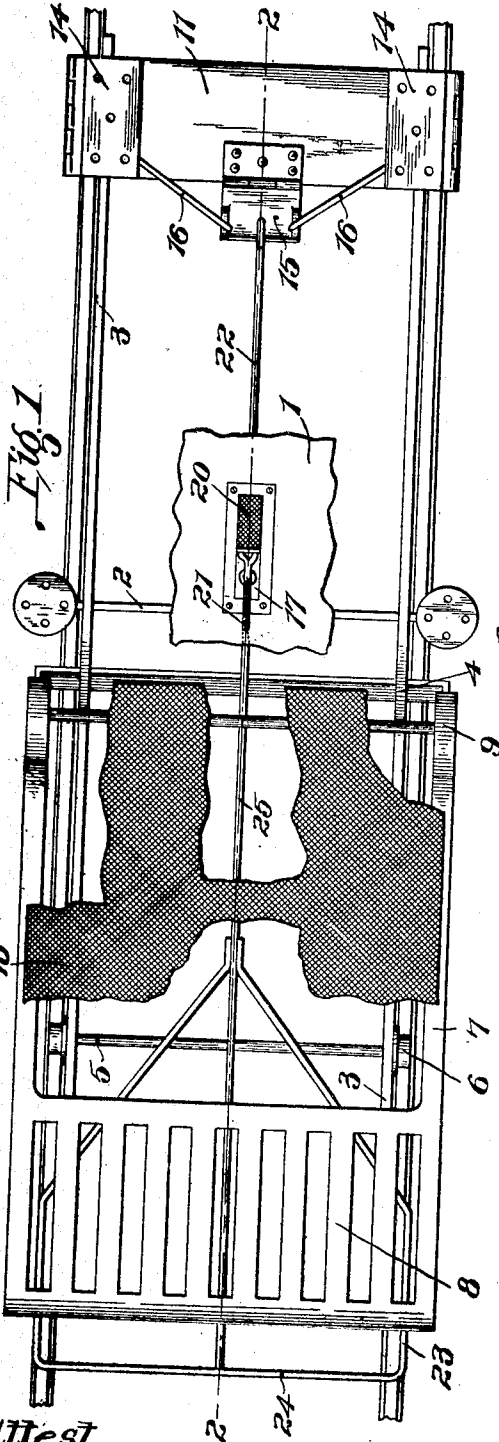


Fig. 1.

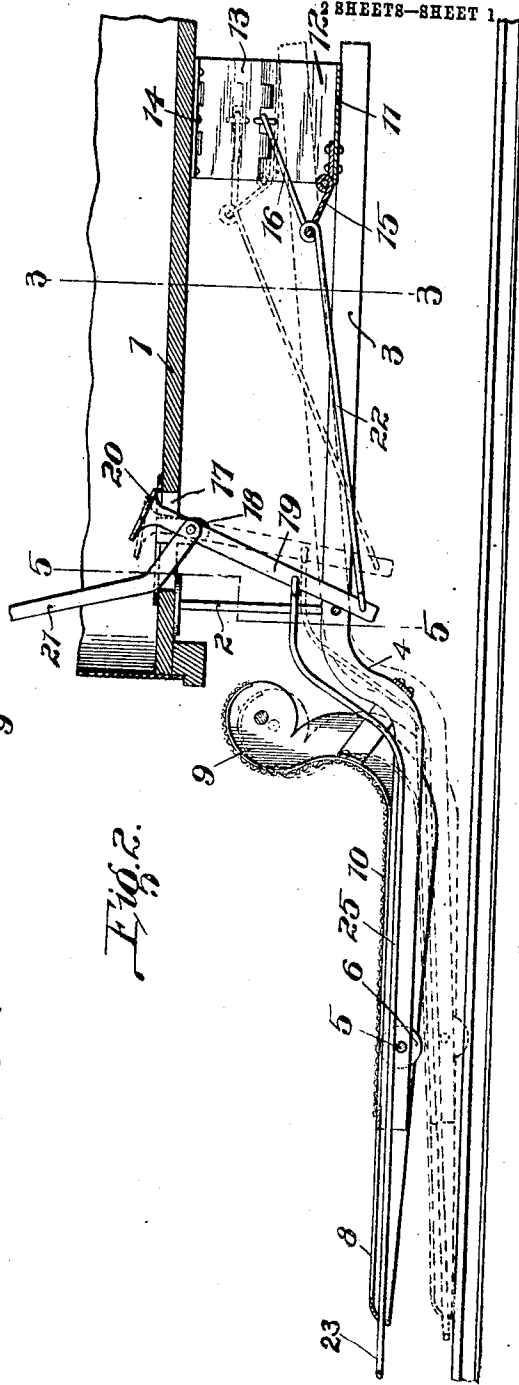


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

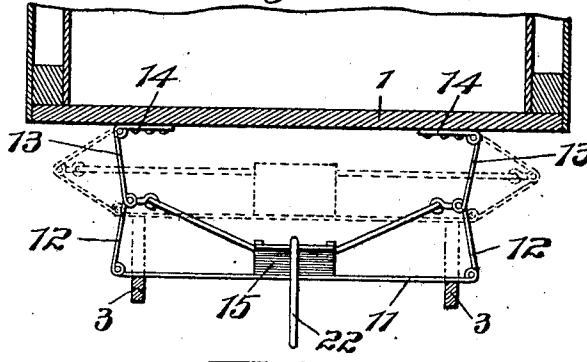


Fig. 4.

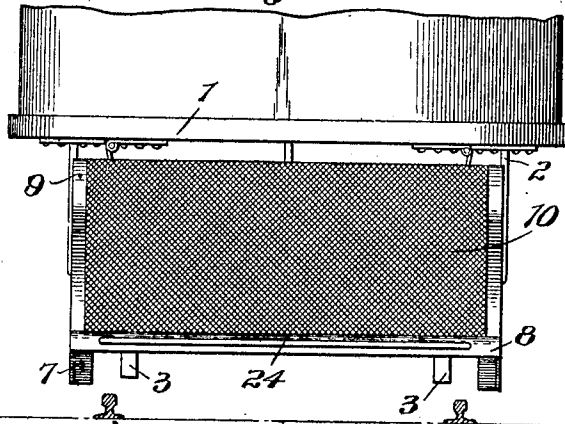
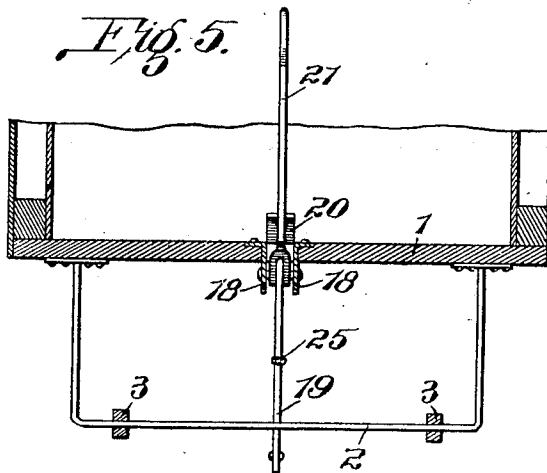


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT DOSS, OF ST. LOUIS, MISSOURI.

CAR-FENDER.

No. 916,540.

Specification of Letters Patent.

Patented March 30, 1909.

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To all whom it may concern:

Be it known that I, ALBERT DOSS, citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a car fender, the object of my invention being to construct a simple, inexpensive apparatus which is positioned beneath and in front of a car platform, and which is designed to drop into position to receive an object on the car track, and the operation of which fender is both automatic and pedally controlled by the motorman or car driver.

A further object of my invention is to equip the projecting portion of the fender with traction wheels which when the fender is thrown into operation, ride upon the track rails, thereby preventing the body of the fender from coming in contact with the ground or pavement with resulting breakage or injury.

A further object of my invention is to provide means whereby the motorman or car driver may readily elevate and reset the fender without leaving his post on the car platform.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts which will be hereinafter more fully set forth, pointed out in the claims, and illustrated in the accompanying drawings, in which:

Figure 1 is a plan view of a fender of my improved construction, the same being detached from the car; Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1, and showing a portion of the car platform; Fig. 3 is a cross section taken on the line 3—3 of Fig. 2; Fig. 4 is a front elevation of the fender, and Fig. 5 is a vertical section taken on the line 5—5 of Fig. 2.

Referring by numerals to the accompanying drawings: 1 designates the car platform, and fixed thereto, adjacent the front end of the platform, are the ends of a U-shaped hanger 2, and pivotally mounted on the horizontal portion of said hanger is a pair of laterally disposed bars 3, which are bent downward, as designated by 4, at points immediately in front of the hanger 2, in order to bring the forward portions of said bars

into close proximity to the track and pavement. Transversely arranged between the forward portions of the bars 3 is a shaft 5, on the ends of which are mounted small traction wheels 6, which are adapted to ride on the track rails when the fender is dropped for use.

Rigidly fixed in any suitable manner on the forward portions of the bars 3 is a rectangular frame 7, the forward portion of which is slatted, as designated by 8, and said slatted portion projects in front of the forward end of the bars 3. The rear portion of the side rails of this frame 7 is curved upward, as designated by 9, and covering the entire rear portion of this frame and extending forward to the slatted portion 8 is a net or screen 10.

Fixed to the rear ends of the bars 3 is a transversely disposed plate 11, and hinged to the ends thereof are vertically disposed plates 12, and hinged to the upper ends of said plates 12 are plates 13, which in turn are hinged at their upper ends to plates 14, fixed to the under side of the car platform immediately above the ends of the plate 11. The hinged joints between the plates 12 and 13 are so formed as that said joints permit the plates to move inward a short distance beyond vertical lines drawn through the points where said plates 12 and 13 join the plates 11 and 14, which position is clearly shown by solid lines in Fig. 3, but when the forward end of the fender drops, the meeting ends of the plates 12 and 13 swing outward into the positions shown by dotted lines in Fig. 3.

Hinged to the front edge and center of the plate 11 is a plate 15, and pivotally connected to the forward corners thereof are the inner ends of a pair of rods 16, the outer ends of which are pivotally connected to the hinges between the plates 12 and 13.

Formed through the platform 1, adjacent the point occupied by the motorman or car driver, is an opening 17, and depending from the car platform at the side of this opening is a bracket 18, to which is fulcrumed a vertically disposed lever 19, the upper end of which projects through the opening 17 and is provided with a foot plate 20.

Fulcrumed to the bracket 18 and projecting upward through the opening 17, immediately adjacent the dash board, is a hand lever 21. Pivotally connected to the plate 15 is a rod 22, the forward end of which is pivotally connected to the lower end of the

lever 19. A pair of rods 23 are arranged to move longitudinally through the forward end of the frame 7, the forward ends of which rods are connected by a transversely-disposed guard rail 24, and the rear ends of the rods 23 are connected to a centrally disposed rod 25, which extends rearward beneath the frame 9, and said rod being connected at its rear end to the lever 19.

When a fender of my improved construction is attached to a car, the various parts are in the positions seen in Figs. 1 and 2, with the forward ends of the bars 3 and the car track, and being so held by the hinged plates 11 and 13, which are swung inward to their limits of movement.

To drop the forward end of the fender on the track to engage an object thereon, the motorman or car driver pedally engages the foot plate 20, forcing the same forward a slight distance, which action moves the lower end of the lever 19 rearward, thus elevating the plate 15 and in turn forcing the rods 16 outward, which action moves the hinged plates 12 and 13 outward, and as the hinges between said plates pass the center line, the weight of the frame 7 and the forward ends of the bars 3 will throw the rear ends of said bars 3 upward, consequently moving the plate 11 upward into the position shown by dotted lines in Figs. 2 and 3, and the frame 7 on the forward ends of the bars 3 drops into position to pick up an object on the track, and when in such position the wheels 6 ride upon the track rails and thus carry the forward portion of the fender in an easy manner and prevent the same from coming in contact with the track rails and pavement. This dropping movement of the fender will automatically take place without any action on the part of the motorman or car driver when the guard rail 24 strikes against an object on the track, as any rearward movement of said guard rail is transmitted to the lever 19 by means of the rod 25.

After the fender has been dropped and it is desired to elevate the same, the motorman or car driver manually engages the lever 21 and pulls the same rearward, and by so doing the lower portion of the hand lever 21 strikes against the forward edge of the foot plate 20, and bearing thereagainst shifts the lever 19 upon its pivot, thereby moving the lower end of the lever 19 forward, in turn pulling downward on the plate 15 and bringing the hinged plates 12 and 13 to their normal positions, which action causes the plate 11 to bear downward upon the rear ends of the bars 3, in turn elevating the forward ends of said bars and the frame 7.

A car fender of my improved construction comprises a minimum number of parts, operates automatically or by action of the mo-

torman or car driver, and is very effective in use.

I claim:

1. A car fender comprising a hanger fixed to the under side of the car platform, a pair of bars pivotally arranged on the hanger, collapsible means arranged on the under side of the car platform and normally engaging the rear ends of the bars, and a frame carried by the forward ends of the bars.

2. A car fender comprising a hanger fixed to the under side of the car platform, a pair of bars pivotally arranged on the hanger, collapsible means arranged on the under side of the car platform and normally engaging the rear ends of the bars, a frame carried by the forward ends of the bars, and pedally operated means arranged on the platform for causing the collapsible means to collapse and permitting the rear ends of the bars to move upward.

3. A car fender comprising a hanger fixed to the under side of the car platform, a pair of bars pivotally arranged on the hanger, collapsible means arranged on the under side of the car platform and normally engaging the rear ends of the bars, a frame carried by the forward ends of the bars, and means carried by the frame and connected to the collapsible means for causing the latter to collapse when the frame contacts with an object on the track.

4. The combination with a car of a hanger on the under side of the car platform, a pair of bars pivotally arranged on the hanger, a frame positioned on the forward ends of the bars, a pair of traction wheels arranged on the under side of the frame and adapted to ride on the track rails when the fender is dropped, and normally expanded collapsible means interposed between the rear ends of the bars on the under side of the car platform.

5. The combination with a car of a hanger on the under side of the car platform, a pair of bars pivotally arranged on the hanger, a frame positioned on the forward ends of the bars, a pair of traction wheels arranged on the under side of the frame and adapted to ride on the track rails when the fender is dropped, normally expanded collapsible means interposed between the rear ends of the bars on the under side of the car platform, and means whereby the collapsible means is caused to collapse to permit the rear ends of the bars to swing upward and the forward ends of said bars to drop.

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

ALBERT DOSS.

Witnesses:

ARTHUR M. LEISSE,
M. P. SMITH.