

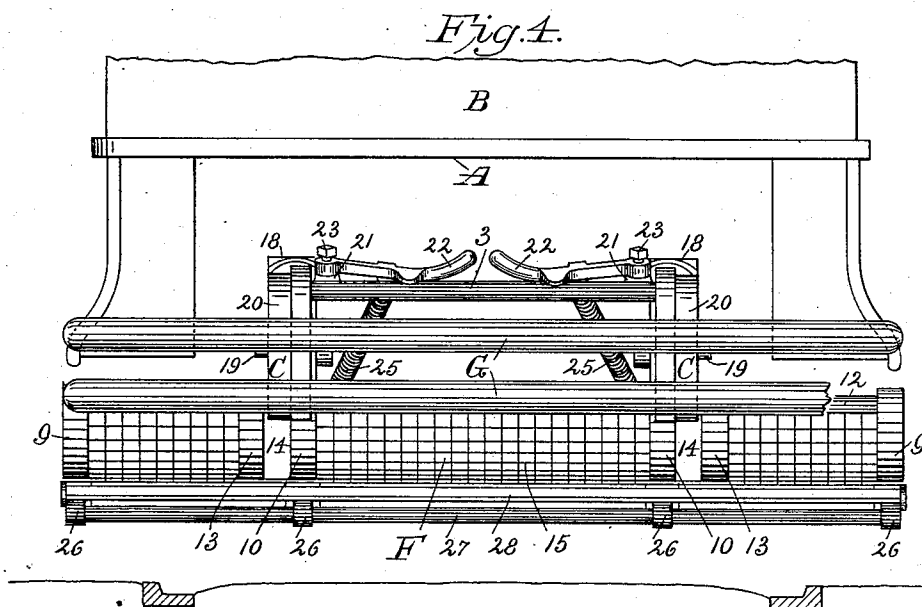
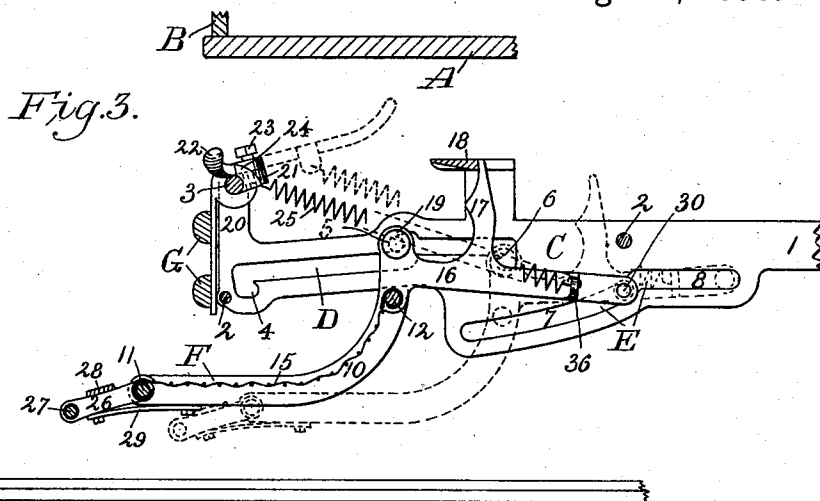
(No Model.)

2 Sheets—Sheet 2.

E. McCREARY.
CAR FENDER.

No. 565,914.

Patented Aug. 18, 1896.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD McCREARY, OF COHOES, NEW YORK, ASSIGNOR OF TWO-THIRDS
TO GEORGE H. FITTS AND ALFRED BLYTH, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 565,914, dated August 18, 1896.

Application filed March 10, 1896. Serial No. 582,560. (No model.)

To all whom it may concern:

Be it known that I, EDWARD McCREARY, of Cohoes, in the county of Albany and State of New York, have invented new and useful Improvements in Automatic Car-Fenders, of which the following is a specification.

This invention is an improvement on the invention described and claimed in Letters Patent No. 554,495, dated February 11, 1896; and the object of my invention is to remedy certain defects which exist in the car-fender shown and described in said Letters Patent and to render the car-fender more effective in its operation.

In the accompanying drawings, which are herein referred to and form part of this specification, Figure 1 is a side elevation of my invention; Fig. 2, a plan view of the same; Fig. 3, a longitudinal section at the line X X on Fig. 2, and Fig. 4 a front elevation.

As represented in the drawings, A designates the platform of a street-car of ordinary construction, and B one of the dashboards, of which only a small portion is shown; C, brackets for carrying the life-guard. Said brackets are provided with posterior arms 1, of which only a portion is shown in the drawings, said arms being adapted for securing said brackets to the car-trucks, or, when preferred, to securing the brackets to the under side of the floor of the car. The brackets C are connected together in pairs to form parallel lines by means of cross-ties 2 and 3, by which said brackets will be retained at a required distance apart. The forward portion of each bracket C is provided with a slotted opening D, whose outer end is provided with a locking-seat 4, by which the life-guard will be retained in its forwardly-projected position. From said locking-seat the slotted opening D is formed in about a straight line to a locking-seat 5, by which the life-guard will be held in its mid-position, in which it is normally retained while out of active service and is ready to be thrown into action in the position shown by full lines in Fig. 1. From the last-named locking-seat the slotted opening D is carried in a direct line to terminate in a locking-seat 6, by which the life-guard will be retained in its rearmost position, as indicated by dotted lines in Fig. 3. Each bracket C is

also provided with a slotted opening E, that is auxiliary to the slotted openings C for the purpose of preventing any excessive tilting movement of the life-guard. The outer portion 7 of the slotted opening E is inclined upward to join a horizontal portion 8 at its inner end.

F is a life-guard that is fitted to be slid forcibly forward in the slotted openings of the brackets C. Said life-guard consists of side arms 9 and intermediate arms 10, connected together by rods 11 and 12. The arms 10 are provided with branch arms 13 to form slots 14, which, when the life-guard F is pushed to its rearmost position, as indicated by dotted lines in Fig. 3, will span around the foremost end of the brackets C, in which position the life-guard F will virtually be entirely under the platform A. A netting 15 is secured to the rods 11 and 12 and arms 9 and 10 to form a platform for receiving the body of a person when the life-guard F comes in contact therewith; but, when preferred, any other covering than such netting may be used for a like purpose. Each of the arms 10 is provided with a rearward extension 16, provided with a vertical arm 17, whose upper end is fitted to engage in an open fork 18, formed on the upper side of each bracket C, such engagement only existing while the life-guard F is in its mid-position, as shown by full lines in Fig. 3, during which time spurs 19 on the arms 10 will engage in the locking-seats 5 to retain the life-guard F in its mid-position, as shown by full lines in Fig. 1.

The cross-tie 3 is secured in vertical arms 20, formed on the outer end of the upper side of each bracket C, and said cross-tie is provided with lugs 21 near each of its ends, and each of said lugs has a lever 22 fulcrumed thereon, as at 23, so that said levers will swing on a horizontal plane. The cross-tie 3 is also provided with catches 24, for locking the levers 22 in the position shown by the full lines on Fig. 2. Each lever 22 is connected to a corresponding spiral spring 25, whose opposite end is attached to a lug 26 on each extension 16, said springs being arranged to forcibly project the life-guard F outward, into the position indicated by dotted lines in Fig. 1. When the levers 22 are

disengaged from the catches 24, said levers may be swung into the positions indicated by dotted lines in Fig. 2, whereby the tension on the springs 25 will be sufficiently lessened to allow the life-guard F to be pushed inward to the position shown by full lines in Fig. 1, after which the levers 22 should be swung to reengage with the catches 24, whereby the springs 22 will be restored to their full tension when the life-guard F is in its mid-position. To the rod 11, at the forward edge of the life-guard F, links 26 are jointed to swing in a vertical plane. Said links, with a cross-bar 27 and a tie 28, constitute a fender that is hinged to the forward edge of the life-guard F.

The forward edge of the fender is normally retained in a raised position where it will clear the road-bed, and this raised position is effected by a series of flat springs 29, of which one is attached to each link 26, one end of the spring being secured to the link and the opposite end to a corresponding arm 9 or 10, according to the position of said spring. When, by contact with a body, either animate or inanimate, the forward edge of the fender is depressed to bear upon the road-bed, the spurs 19 will be thrown out of the locking-seats 5, thereby releasing the arm 17 from the forks 18 and allowing the life-guard F to move forward into the position indicated by dotted lines in Fig. 1. In the rearmost portion of each extension 16 a pin 30 is fixed to engage in the slotted opening E, so as to prevent the life-guard F from being oscillated on the spurs 19, which oscillation will throw said life-guard out of its proper position. Said pins are fitted to slide loosely in the slotted openings E. To the cross-tie 3 or other convenient part a guard G is attached, either by hinging or fixed stationary, to partially or fully close the space between the upper edge of the life-guard F and platform A, and thereby provision is made to prevent a possible accident by a person being thrown under a car through said space. By hinging the guard G to the cross-tie 3 said guard can be swung upward for the purpose of obtaining access to the brackets C and other parts to make an examination of them.

By arranging the life-guard F to be moved into its extreme rearward position, as indicated by dotted lines in Fig. 3, provision is made for closely storing the cars when they are out of use.

While the car is in use the life-guard F should be normally retained in the position shown by the full lines in Figs. 1 and 3, and its operation will be as follows: When the fender of the life-guard F comes in contact with an obstruction, the body of a person or other

matter, the life-guard F will thereby be forced slightly rearward to release the spurs 19 from the locking-seats 5, and the life-guard will drop to carry the spurs 19 into the foremost straight portion of the slotted openings D. Then the springs 25 will forcibly move the life-guard F forward into the position indicated by dotted lines in Fig. 1, and the continued forward motion of the car will cause the body to be moved on said life-guard until danger of a more serious accident has been avoided. After the weight has been removed from said life-guard the levers 22 should be disengaged from the catches 24, thereby allowing said levers to be swung backward to relax the tension on the springs 25, so as to allow the life-guard F to be restored to its mid-position and leaving the device in condition for a repetition of the operation above described.

In practice, by making the springs 25 of sufficient strength, the locking-seats 4 may be dispensed with, and said springs may be utilized for retaining the life-guard F in its forwardly-projected position, and my invention embraces such a modification.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A life-saving attachment for railway cars, comprising brackets, C, provided with a slotted opening, D, having locking-seats, 5 and 6, formed therein as herein described, and provided with auxiliary slotted openings, E, as set forth; said brackets being attachable to a car or its truck, a life-guard, F, having spurs, 19, fitted to slide in the slotted openings C; said life-guard being provided with arms, 10, having a rearward extension, 16, each being provided with a pin 30 arranged to slide in corresponding slotted openings E, as and for the purpose specified.

2. In a life-saving attachment, the combination of brackets, C, provided with slotted openings, a life-guard, F, arranged to slide in said slotted openings, levers fulcrumed to a cross-bar between said brackets and fitted to lock on catches, 24, and springs, 25, connected to said levers and life-guard, as and for the purpose specified.

3. In a life-saving attachment, the combination, with a life-guard, F, having a sliding movement in brackets, C, as set forth, of a guard, G, hinged to a cross-bar, 3, or other stationary part of the apparatus; said guard being placed between the upper face of said life-guard and the platform of a car, as and for the purpose specified.

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Witnesses:

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