

UNITED STATES PATENT OFFICE.

JOHN ARNOLD WOLFRAM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
OF ONE-HALF TO GOTTLIEB J. HUTT, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 551,702, dated December 17, 1895.

Application filed August 2, 1895. Serial No. 557,978. (No model.)

To all whom it may concern:

Be it known that I, JOHN ARNOLD WOLFRAM, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Car-Fenders, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a novel construction of car-fender, which is adapted to be thrown into operation when an object is struck, provision being made for causing a portion of said fender to shoot forward, and thus assist in the formation of a suitable cradle, in which the object struck is adapted to be retained.

It further consists in novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a side elevation of a car-fender embodying my invention, the same being shown detached from the car. Fig. 2 represents a plan view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A designates a car-fender, the same consisting of the side frames B, which are composed of the upright and substantially horizontal members C and D, respectively, said frames being braced by means of the cross-rods E and F. G designates a cross rod or brace for said frame, which has mounted thereon the pulley, spool or drum H, around which the connection J is wound, the end of said connection being attached to the cross-piece K, to be hereinafter referred to. L designates a dog or pawl which is pivotally mounted adjacent to said pulley, and having a nose adapted to engage a suitable notch or recess in said pulley as a ratchet, whereby the same may be locked in position, as is evident.

M designates the forward portion or buffer of a trigger M', which is partially covered with netting N', and serves to throw the device into operation, from which trigger extend the rearwardly-converging bars P, which latter meet at the point Q, which is adapted to contact with the end R of the dog L when the trigger moves rearwardly after an object is struck, as will be explained, it being understood that said trigger is reset and held in

position in any desired manner. S designates grooved rollers journaled in the sides of said trigger M', which are adapted to work on the ways T, which latter serve as a track to prevent any displacement of said trigger M', so that a positive and uniform movement is imparted to every portion of the same.

U designates side rods of the frame U', mounted underneath the fender proper, the forward portions of said rods U being joined together by the cross-piece or buffer V, while their rear ends are connected by means of the cross-piece K, hereinbefore referred to, said movable frame being suitably guided in the eyes or staples W.

X designates levers, which are provided with the slots Y therein, which work upon the pin Z, attached to the brace B', the lower end of said levers being pivotally attached to the cross-bar K, while the upper end is attached to an end of the spring A', the other end of the latter being secured to a suitable fixed point, as the upright member C, of the frame A.

The operation is as follows, it being understood that the fender is attached to the front of the car by means of hooks or other devices: It will now be seen if an object is struck the contact of the same with the buffer M will cause the latter to move rearwardly until the point Q contacts with the end R of the dog L, the nose of which latter will then be thrown out of engagement from the ratchet, whereupon as the pulley is now released, as is also the connection J, owing to the contractile tendency of the spring A', the upper ends of the bars X will move rearwardly, while the lower ends will be moved forwardly, and the frame U', carrying the buffer V, will immediately shoot forward and assume the position seen dotted in Fig. 1.

It will be apparent from the foregoing that the impact of the object struck will cause the same to fall into the netting C', and as the buffer V is raised in front of the buffer M the object is retained in the cradle or basket thus formed and prevented from rolling out and thereby exposed to injury.

If desired, a link or other connections may be made between the point Q and the end R of the dog L, and it will also be understood that other changes may be made according

to requirements which will come within the scope of my invention, and I do not therefore desire to be limited in every instance to the exact construction I have herein shown and described.

5 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car fender, an angular frame with
10 netting thereon, a sliding trigger movable on side bars on said frame, spring-actuated levers pivotally connected with said frame, the sliding frame U' with netting thereon attached to said levers, and a locking device for
15 said frame U' connected with said angular frame, said trigger being adapted to release said locking device, said parts being combined substantially as described.

2. In a car fender, a suitable frame, a cross
20 bar thereon, ratchet and pawl mechanism L and H suitably supported, a trigger adapted

to release the same, connections from said ratchet to a movable frame, a slotted lever attached to the latter, a pin upon which said lever is mounted, and a spring adapted to actuate the same when an object is struck and the pawl released, substantially as described. 25

3. In a car fender, a supporting frame, ratchet and pawl mechanism mounted thereon, a trigger adapted to actuate the same, 30 grooved rollers and ways adjacent the sides of said trigger for causing the same to move uniformly, a frame below said fender, slotted bars or levers common thereto, and springs connected to said bars and to a suitable fixed 35 point, whereby the latter frame is caused to shoot forwardly when an object is struck, substantially as described.

JOHN ARNOLD WOLFRAM.

Witnesses:

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