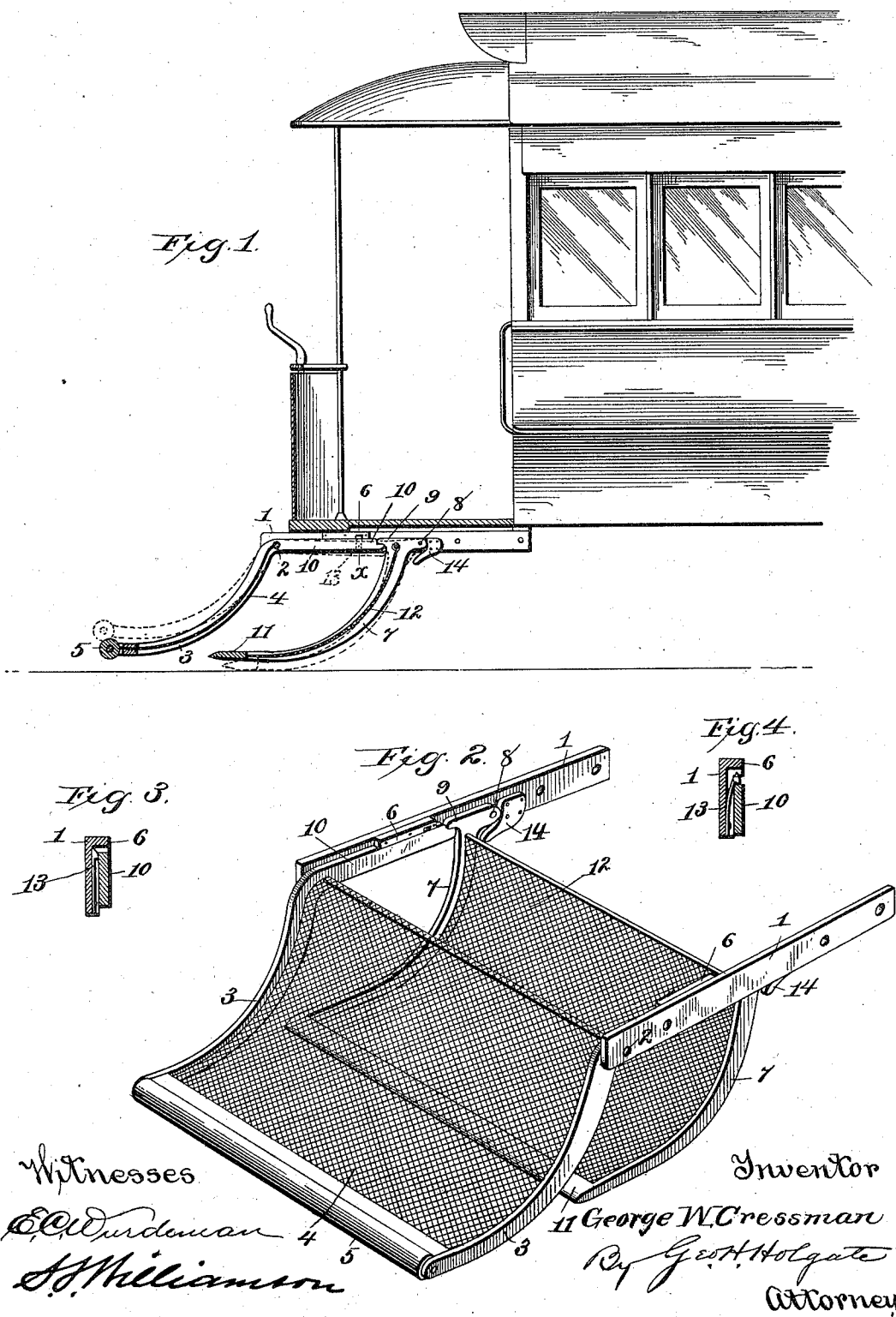


(No Model.)

G. W. CRESSMAN.
CAR FENDER.

No. 576,341.

Patented Feb. 2, 1897.



UNITED STATES PATENT OFFICE.

GEORGE W. CRESSMAN, OF BARREN HILL, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 576,341, dated February 2, 1897.

Application filed March 11, 1896. Serial No. 582,810. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. CRESSMAN, a citizen of the United States, residing at Barren Hill, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in car-fenders, and has for its objects to construct a fender which shall project in front of a car and in conjunction therewith provide a secondary fender or scoop which is placed back of the primary fender, and which, should the latter fail to pick up a person with whom it comes in contact, will bring the secondary fender into such a position as to preclude the possibility of the person passing thereunder.

With these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by number to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a side elevation of one end of a car, showing my improvement applied thereto; Fig. 2, a perspective of my compound fender; Fig. 3, a detailed section at the line *x* of Fig. 1, and Fig. 4 a similar view showing one of the lock-springs in a position to hold the secondary fender in its depressed position.

Similar numbers denote like parts in the several views of the drawings.

In practice the fenders now in use, when constructed to project in front of the car, cannot be carried in such close proximity to the road-bed, on account of the oscillations of the body of the car, as to insure the picking up of a person when prostrate upon the road-bed, and this is especially true of small children, in which case when struck by the front end of a fender as now constructed the latter is permitted to move upward and ride over the person, thus increasing the danger to such person, as when once under the fender it will be impossible for him to escape the wheels of the car. This difficulty I have entirely over-

come by arranging a secondary fender in conjunction with the primary fender in the following manner:

1 represents two brackets, which may be secured to any convenient part of the car by bolting or otherwise, to the outer ends of which are pivoted at 2 the side bars 3 of the primary fender, which curve downward and outward, so as to form a cradle, over which a suitable net 4 is stretched. The front end of this primary fender is provided with a buffer-roll 5, journaled between the side bars at their outer ends, so that should the primary fender come in contact with the road-bed the friction therebetween would be reduced by this roll, thus preventing injury to the fender or road-bed. The heel ends 10 of the side bars 3 extend backward and normally lie parallel with the brackets 1, in which position they are held by the gravity of the primary fender, causing them to bear against the under side of the stop-blocks 6, which latter are secured upon the inner sides of said brackets. The secondary fender is also composed of two downwardly and outwardly curved arms, which are pivoted at 8 to the brackets, and these arms are provided with toes 9 at their upper ends for engagement with the rear ends of the heels 10, by which means the secondary fender is held in its normally-elevated position, as shown in full lines in Fig. 1. The lower ends of the secondary fender are connected by a foot-board 11, and a suitable net 12 is stretched over this fender. Spring-latches 13 (but one of which is shown in dotted lines in Fig. 1) are secured to the brackets and adapted to engage the upper edges of the heels 10 when the latter are depressed for the purpose of holding the primary fender in the elevated position shown in dotted lines in Fig. 1.

From this description the operation of my improvement will be obviously as follows: Should a car fitted with my improvement, passing rapidly along a track, run down a person, the primary fender will ordinarily scoop up such person and thrust him upon the net 4, where he will be safely retained until the car can be stopped, but should such person be knocked down upon the road-bed and lie so close thereto as to prevent the primary fender from scooping him up the buffer-roll in

riding up over the person will lift the front end of the primary fender, which will cause the heel ends 10 of the side bars 3 to swing downward, and as the secondary fender is supported by these heel ends it will be dropped to the position shown in dotted lines in Fig. 1, or in such close proximity to the road-bed as to insure the scooping up of the person over which the primary fender has passed. The primary and secondary fenders will be held in these last-named positions by the spring-actuated latches 13 engaging the heel ends 10 when swung downward, so that should the primary fender clear the person before the secondary fender scoops him up the secondary fender will not be elevated. To prevent the secondary fender from dropping below its normal position, the stops 14 are provided, which are so placed as to arrest the downward movement of this fender. After the secondary fender has been brought into operative position, as just described, it may be returned to its normal position by forcing the catches backward until they are disengaged from the heels 10, when the primary fender by its weight will swing these heels upward and with them the secondary fender.

It will of course be understood that a pair of my improved fenders is applied to each end of a car, and the brackets may be made detachable, so that the compound fender may be detached from one end of the car and attached to the opposite end when the car is to move in an opposite direction.

Having thus fully described my invention, what I claim as new and useful is—

1. In a car-fender, a bracket secured to a car, a main frame hinged thereto, a rearwardly-projecting arm on said frame, a block to limit the upward movement of said arm, a spring-catch located in the block and adapted to engage and retain it in its lowered position, a secondary frame also hinged to the bracket, a projection formed on the secondary frame adapted to be engaged by the end of the arm and thereby keep the secondary frame in an elevated position until the main frame is raised, as and for the purpose described.

2. In combination with a car, a pair of brackets secured to one end thereof; a primary fender composed of two side bars pivoted to said brackets; a buffer-roll journaled in the outer ends of said side bars; heels formed with said side bars and extending rearward; stop-blocks for arresting the upward-swinging movement of said heels; a secondary fender also composed of two curved arms pivoted to the brackets; a foot-board connecting the outer ends of the last-named arms; toes formed with said arms and adapted to engage said heels, and latches for holding the primary fender in an elevated position whereby the secondary fender is held in a lower position, as shown and described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

GEORGE W. CRESSMAN.

Witnesses:

S. S. WILLIAMSON,
ALLISON W. MCCURDY.