

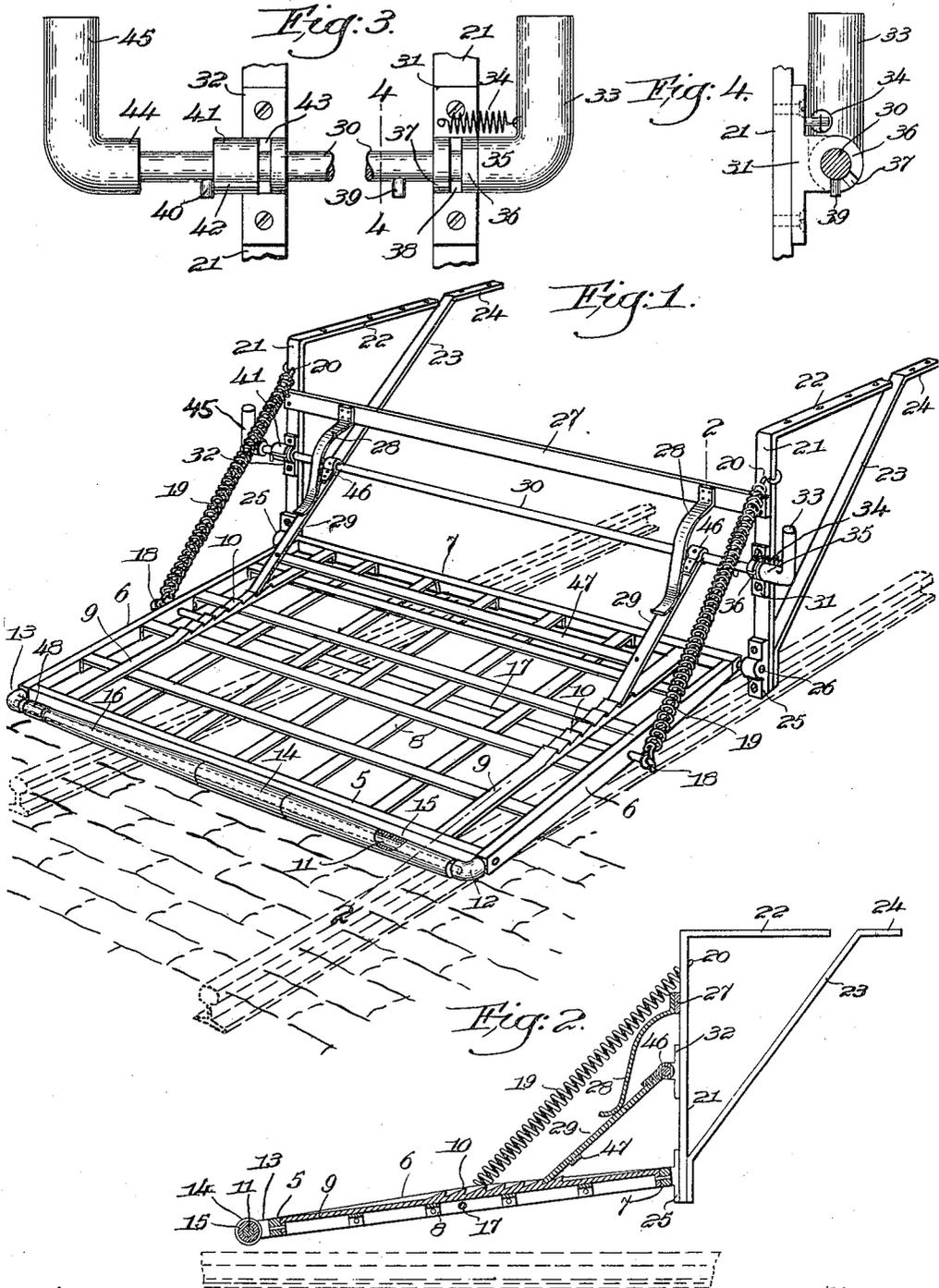
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CAR FENDER.

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CAR-FENDER.

1,069,467.

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To all whom it may concern:

Be it known that I, GEORGE H. PUTNAM, a citizen of the United States, residing at South Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification, reference being had therein to the accompanying drawing.

There have been many forms of car-fenders devised for electric cars, with the object of lessening the danger to the life of pedestrians and although most of the devices have some merit yet the great objection to their adoption by the street car companies is their cost, and the fact that they are not so decidedly efficient as to justify the expense of installation. Many of the devices are held by one or more chains suspended a few inches above the tracks or held by said chains in a normal or folded position and so arranged as to be dropped into a tripped position upon the rails by action of the motorman. The use of chains is however objectionable as downward motion toward the rails when a body or article is struck is impossible when the fender is supported a few inches above the rail by the chain or chains, except by action of the motorman or some other party.

Although my invention with very little or no changes can be used on automobiles as well as electric cars yet it relates particularly to fenders for use on street-cars, especially those propelled by electric or cable power or other means than animal power, and it belongs to that class of fenders which are placed as stationary fenders beneath the car just forward of the truck, or are placed as movable fenders on the forward portion of the car, and are held, when in use, ordinarily at a short distance above the track rails, and my device is so constructed that, in either case, it will pick up the body or object struck by it, thus preventing cutting of the body or object by the car wheels or crushing of the same by the trucks.

My fender is particularly adapted to be used as an under the car truck fender ordinarily having its forward roller portion normally about four inches from the rails but adapted to be held down to within one inch or even upon the rails or held with its forward portion inclined upwardly, and the principal object of my invention is the pro-

viding of a fender held in a position to catch a person or large object, by depressing means, and elastic supporting means for holding the same in the operative position but adapted to give slightly when a weight falls upon the fender, said depressing and supporting means being arranged as much to the extreme sides as possible, so as to offer no obstacle to the person falling on the fender from the front and to serve as a means for assisting the fallen person to support himself on the fender.

The invention consists in the construction and combinations of parts hereinafter described and set forth in the claims.

In the accompanying drawings Figure 1 is a perspective view of my invention, the rails and street shown in dotted lines forming no part of the invention. Fig. 2 is a sectional view on the lines 2—2 of Fig. 1. Fig. 3 is a front elevation of the two pawl operating handles and contiguous parts on a larger scale. Fig. 4 is a transverse sectional elevation on the line 4—4 of Fig. 3 showing one of the handles from the inner side of one of the supporting brackets.

Corresponding and like parts are referred to in the following description and indicated in all of the views of the drawings by the same numeral reference characters.

As shown in the drawings the fender platform consists of the forward bar, designated as 5, having its ends inserted in or supported by the forward portion of the side bars 6, which latter have their rear ends inserted in or supported by the rear cross bar 7. Between the side bars 6 extend the upper bars of the grating 8 which upper bars are adjacent to or rest upon the lower bars of the grating, the said lower bars extending from the rear cross bar 7 to the forward bar 5, all of the bars of the grating being preferably riveted to the side bars. Extending from the forward bar to the rear cross bar is a pair of parallel racks or toothed bars placed one near each side bar just above or resting upon the upper bars of the grating, and these toothed bars or racks 9 have teeth 10 adapted to be engaged by the pawls or spring bars 29 when it is desired to hold the fender platform in a depressed position against the tension of the elastic means 19, shown in the drawings as springs.

A rod 11 is supported by the elbows 12 and 13 provided on the front ends of the

side bars 6 and midway of the rod is located the tubular portion or cylindrical roller 14 to each side of which is placed conical rollers 15 and 16, the roller 15 being slightly longer than roller 16, the greatest diameter of the rollers being adjacent and equal to the diameter of the ends of roller 14. If desirable the parts 14, 15 and 16 may be formed integral. Between the smaller end of roller 16 and elbow 13 is placed a collar or short roller 48 which allows of the ready assembling of the roller parts, rod and elbows. As the rollers 15 and 16 are inclined or reduced in size as they extend from the central portion or roller 14 toward the elbows, it is readily understood that as a car turns a curve, if the fender's rollers are running along the rails, that as the car turns, the forward ends of the fender are slightly raised from the ground rather than toward the ground as would be the case if only one cylindrical roller was used extending from side to side.

About midway of the fender platform, below the grating, and extending across the fender through the side bars 6 is the rod 17, bent as at 18 over which bend extends the lower hoop or end of the springs 19, the upper end of the springs being secured as at 20 to the uprights of the brackets 21. These brackets have their horizontal portions 22 extending from the vertical portions or uprights to allow of the fender being attached to the under portion or body of the car. These brackets may be further braced by the inclined pieces 23 having end securing pieces 24. When the fender is applied to the front of the car forward of the car platform, it will probably be found desirable to dispense with part or all of the brackets, especially the parts 22, 23 and 24, and to attach the uprights of the brackets 21, or if the entire bracket is left off then the parts 25, 31, 32 and 28, direct to the dash board of the electric car. It is also obvious that the fender could be similarly attached to the front of an automobile or other motor car. It is also apparent that the fender could be used with other supporting means for the fallen weight, other than the grating 8.

The rear cross bar 7 is pivoted as at 26 in the bearings 25 so that when the downward pressure of the pawls 29 is removed from the racks 9 the springs 19 will raise the forward portion of the fender platform. Extending between the brackets 21 is the bar 27 carrying the flat depressing springs 28 acting downwardly upon the pawls 29 hinged as at 46 to the rod 30 supported in the bearings 36, 41 respectively of the bracket hangers 31, 32. On the farther or outer sides of these bracket hangers the rod 30 carries the L-shaped handles 33, 45 and when the rod 30 is in its normal posi-

tion with the pawls 29, preferably connected by the bar 47, in place in mesh with teeth 10, the horizontal portion 35 of the handle 33 abuts or presses against the outer side of the bearing 36 and when in this position the stud 40 is against the outer lower side of the bearing 41, and if found desirable a spring 34 may be used to hold the handle in the position shown. The bearing 36 is provided below its center with the horizontal recess 37 leading into the upright recess or slot 38 through which recess 37 the stud 39 is adapted to slide into the recess 38 when the handle is turned and pulled to the right against the tension of the spring 34; when this happens the stud 40 has passed into the recess 42 and thence through the recess or slot 43. When the stud 40 is in recess 43 and stud 39 is simultaneously in the slot 38 then the pawls have been moved from beneath the springs out of contact with the racks and the horizontal portion 44 of the handle 45 abuts and presses against the outer side of the bearing 41; the bearing 41 being somewhat wider than bearing 36 so that the stud 40 will press against its side preventing movement to the right except when the studs 39, 40 are respectively in alinement with the recesses 37, 42.

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

1. A fender comprising a platform, elastic means connected to the sides of the platform midway thereof for raising the forward portion of the platform; a rack provided upon the upper portion of the platform; a transverse rod adapted to be shifted sidewise; a pawl on said rod downwardly inclined over the rear portion of said platform normally in contact with the rack and limiting the upward movement of said platform; a spring adapted to retain said pawl normally in contact with the rack; and means for shifting said rod sidewise or transversely of the car to disengage said pawl from said rack and permit upward movement of said platform.

2. In a fender, a fender platform; a pair of brackets between the lower portions of which the fender platform is pivoted; spiral springs interposed between said brackets and each side of the platform by which the forward portion of the platform may be raised about its pivots; a pair of racks provided upon the upper side of the platform between the front and rear portion thereof; a rod mounted in the brackets and slidable lengthwise therein; downwardly extending pawls carried by the rod normally in contact with the racks; and means extending over the rod and pressing down upon the pawls when the rod is normally in place for keeping the pawls normally depressed, but so arranged

as not to press upon the pawls when the rod has been slid in the brackets out of its normal position.

3. In a fender, a platform, elastic means 5 having their lower portions connected to the sides of the platform and adapted to raise the forward portion thereof; toothed racks secured to the upper portion of the platform; downwardly inclined pawls normally 10 engaging the teeth of said racks for securing the platform in a downward position against the tension of said elastic means; springs pressing downwardly against the pawls; and means for moving the pawls 15 from beneath the springs and out of mesh with the racks.

4. In a fender, a platform; brackets to which the platform is pivotally mounted, racks, pawls, a rod to which the pawls are 20 secured mounted in the brackets, handles on each end of the rod, a bar carried by the brackets, flat depression springs attached to it above the pawls, means for securing the rod in its normal position, means normally 25 preventing end movement of said rod but permitting such movement when the handles have been turned to withdraw the pawls from beneath the springs out of contact with the racks, and springs on each side of the 30 platform connected to the brackets and normally holding the platform in a slightly raised position above the road bed.

5. In a fender, a fender platform, a pair of brackets between the lower portions of 35 which the fender platform is pivoted; springs adapted to raise the forward portion of the platform about its pivots; a pair of racks provided upon the upper side of the platform between the front and rear portion 40 thereof; a rod mounted in the brackets and slidable lengthwise therein; pawls carried by the rod normally engaging said racks; yielding members acting upon the pawls 45 when the rod is normally in place for keeping the pawls normally in engagement with said racks; and means for moving said rod endwise to disengage said pawls from said racks and yielding members.

6. In a fender, a platform; brackets to 50 which the platform is pivotally mounted;

racks on said platform; pawls coacting therewith; a rod to which the pawls are secured mounted in said brackets; springs for normally retaining said pawls in engagement with said rack and limiting the upward 55 movement of said platform; means for securing the rod in its normal position; means whereby the pawls may be disengaged from said racks to permit upward movement of said platform and springs for 60 normally holding the platform in a slightly raised position above the road bed.

7. In a fender, a platform; brackets on which the platform is pivotally mounted; racks on said platform; pawls coacting 65 therewith; a rod to which the pawls are secured; brackets in which said rod is mounted each provided with a peripheral groove and a radial slot extending from said groove; radial members projecting from said rod 70 normally out of alinement with said slots but adapted to be moved into alinement therewith by movement of said rod about its axis; and a spring for normally holding the platform in a slightly raised position 75 above the roadbed.

8. In a fender, a platform; brackets on which the platform is pivotally mounted; racks on said platform; pawls coacting 80 therewith; a rod to which the pawls are secured; brackets in which said rod is mounted each provided with a peripheral groove and a radial slot extending from said groove; radial members projecting from said rod 85 normally out of alinement with said slots but adapted to be moved into alinement therewith by movement of said rod about its axis; a spring for normally retaining one of said projecting members in frictional contact with an end of one of said rod brackets; 90 and a spring for normally holding the platform in a slightly raised position above the roadbed.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. PUTNAM.

Witnesses:

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