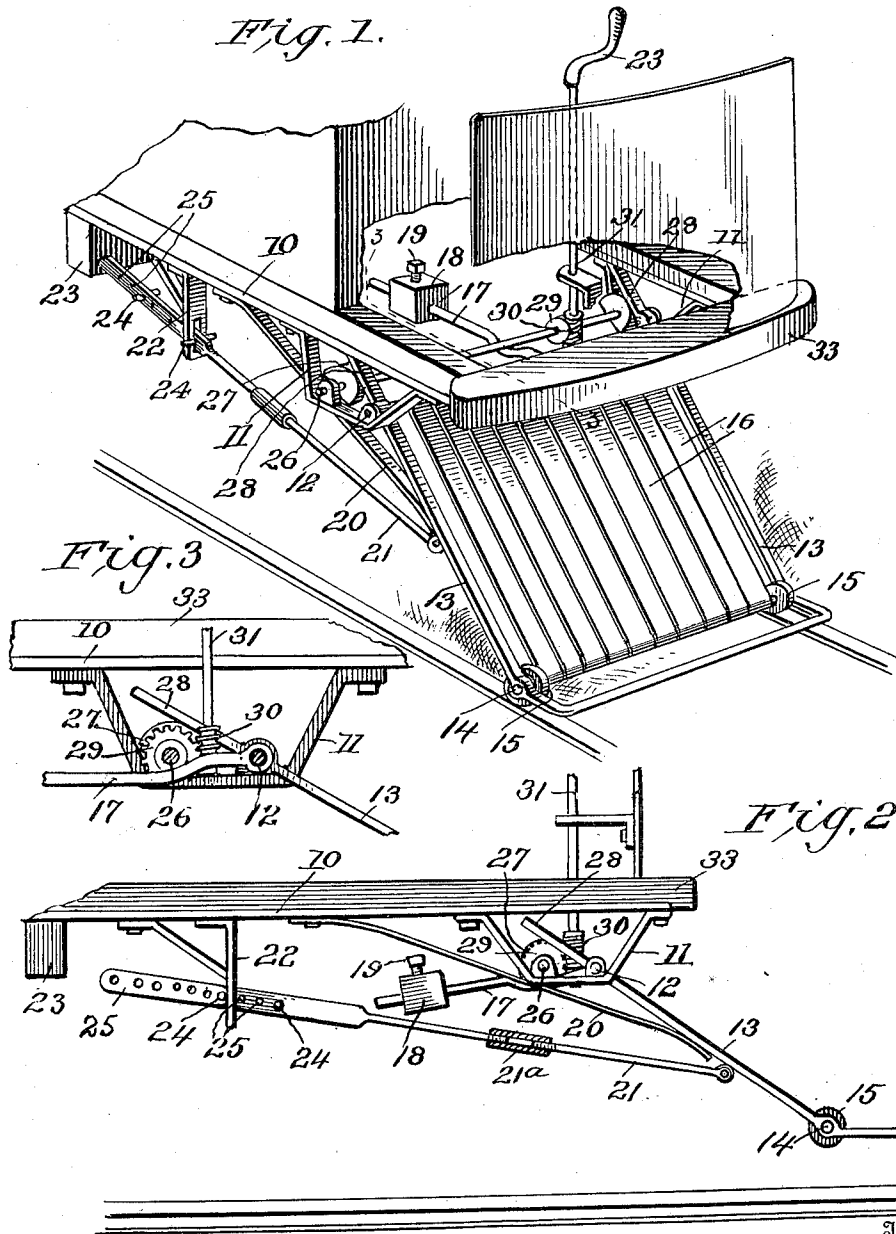


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CAR FENDER.
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UNITED STATES PATENT OFFICE.

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CAR-FENDER.

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To all whom it may concern:

Be it known that I, CHARLES WRIGLEY, citizen of the United States, residing at Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to an improved fender for cars and other vehicles, and is designed for the protection of persons with whom the car when in motion comes in contact.

Another object of this invention is to provide a counterbalanced frame for attachment to the front of the car or vehicle, and to dispose adjustable braces upon the frame adapted to become rigid to support the frame when heavy loads are thrown in or upon the frame.

Another object of this invention is to provide a counterbalanced fender with depressing means which does not interfere with the action of the fender under normal conditions, and which may be brought into action to force the lower end of the fender toward the ground.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of the improved fender as applied to the forward end of a car; Fig. 2 is a side elevation of the fender in a raised position; and, Fig. 3 is a detail sectional view through the operating mechanism of the fender on the line 3—3 of Fig. 1.

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

Referring to the drawings 10 designates a pair of strips provided at their forward ends with depending registering brackets 11. A shaft 12 extends between the brackets 11 and has its opposite ends journaled therein, the shaft forming the upper support for the receiving frame of the fender. The receiving frame comprises, preferably, the side bars 13 joined at their lower ends by a transverse rod 14. The side bars 13 are preferably curved up forwardly of the rod 14 to catch objects brought into contact with the fender. Rollers 15 are mounted

upon the opposite ends of the rod 14 to support the lower end of the receiving frame upon the track or roadway. The receiving frame is covered or closed by a plurality of parallel slats 16, or the like, to support the persons or objects thrown against the fender. The side bars 13 are rigidly secured to the shaft 12, and the shaft carries rigidly secured thereon midway of its ends, an inwardly extending arm 17 carrying thereon a weight 18 adjustably fixed by a set screw 19. The weight 18 is adapted to hold the receiving frame normally out of contact with the ground. A spring 20 is disposed against the under side of each of the strips 10 midway of their ends, the springs having their forward ends bearing against the lower faces of the side bars 13. The springs 20 cooperate with the weight 18 to yieldingly hold the receiving frame up from the ground.

The side bars 13 are provided midway of their ends with hinged braces 21 extending back from the side bars and passing through the lower ends of the guides 22. The guides 22 depend from the strips 10 adjacent to their rear ends, and are in the form of arms provided with slots in their lower ends loosely receiving the brace rods 21 there-through. A batten 23 is carried across the rear extremities and against the under sides of the strip 10, the brace rods 21 being of such length as to strike this batten when the receiving frame is swung down and the rollers 15 engage upon the roadway. The brace rods 21 are each formed of two sections joined at their adjacent ends in threaded relation within a sleeve or turn-buckle 21^a employed in adjusting the lengths of the brace rods so as to position the lower end of the fender at the desired distance above the track. The rear ends of the brace rods 21 are flattened and apertured to receive therethrough spaced pins 24 engaging alternately against the opposite sides of the depending guides 22 to limit the up and down movement of the fender. The flattened ends of the braces 21 are provided with series of openings 25 through which the pins 24 are positioned so as to adjust the latter.

The means employed for holding the receiving frame against the ground and retaining the same in such position comprises a transverse shaft 26 journaled at its ends in the depending brackets 11 at a point

spaced backwardly through the shaft 12. Cams 27 are fixed upon the ends of the shaft 26 immediately beneath extensions 28 of the side bars 13. Toward one end of the shaft 26 a spur gear 29 is mounted, which gear intermeshes with a worm gear 30 carried on the lower end of the turning rod 31. A crank handle 32 is disposed upon the upper end of the rod 31 to rotate the same. The lower end of the rod 31 is journaled through the platform of the car 33 to which the fender is attached.

It will of course be understood that this fender may be applied to motor vehicles of any form whether adapted to be operated over rails or without the same.

In operation, the fender is normally up, as is disclosed in Fig. 2, the fender being held in such position by the weight 18 on the arm 17 and the tension of the springs 20. The weight 18 and the springs 20 are adapted to provide sufficient resistance to the receiving frame against downward movement under vibration. When a heavy load is thrown against the receiving frame, the side bars 13 are swung down, depressing the springs 20 and raising the weight 18 against the lower side of the platform of the car 33. At the same time the brace rods 21 are forced back to slide through the guides 22 and to bring their rear extremities against the batten 23. Under this condition the braces become rigid and a substantial support is thereby afforded for the receiving frame. Rollers 15 also assist in supporting the frame, although they are adapted to rest lightly upon the ground. When the frame is up, as is disclosed in Fig. 2, and it is desired to force the same down without the application of a weight upon the receiving frame, the operator rotates the crank handle 32 and the rod 31 to turn the shaft 26 through the intermeshing gears 30 and 29. This movement of the shaft 26 brings the eccentric portions of the cams 27 against the under sides of the extensions 28, thus swinging the latter upwardly and depressing the side bars 13. As the connection between the turning rod 31 and the shaft 26 is a worm gear, the shaft 26 is locked from movement when a pressure is exerted upon the cam 27 to rotate the same.

Having thus described the invention, what is claimed is:

1. The combination with a car including its base frame having a depending batten, of a car fender including a receiving frame

adapted for hinged engagement beneath the forward end of the car, an arm extending back from the upper end of the receiving frame, an adjustable weight disposed upon the arm for normally depressing the same, springs disposed between the car and the receiving frame for reinforcing the weight, brace rods hinged upon the sides of the receiving frame and extending back beneath the car, guides carried beneath the car for slidably receiving the brace rods, said brace rods being adapted to bear against said batten when the receiving frame is depressed.

2. The combination with a car including its base frame having a depending batten, of a car fender including a hinged receiving frame depending from the car, counterbalancing means disposed between the car and the receiving frame, and adjustable supporting braces carried by the receiving frame for operation upon the depression of the same, and adapted to bear against said batten when the receiving frame is depressed.

3. A fender comprising a receiving frame adapted for attachment to a vehicle, counterbalancing means for adjustably holding the lower end of the receiving frame in elevated position, depressing means engaging with the receiving frame to force the same down, braces slidably disposed between the frame and the vehicle, and means for limiting the forward movement of the braces.

4. The combination with a car including its base frame and a depending batten, of a fender comprising a depending receiving frame adapted for engagement beneath a vehicle, guides depending from the sides of the vehicle rearwardly of the receiving frame, and braces hinged against the sides of the receiving frame and engaging slidably through the guides, said braces being adapted to bear against the batten.

5. The combination with a car frame having a depending batten, of a fender comprising a receiving member adapted for attachment upon the forward end of a vehicle, and rearwardly extending braces carried upon the member adjacent to its lower end, said braces being adapted to bear against said batten when the member is depressed.

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

CHARLES WRIGLEY. [L. s.]

Witnesses:

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