L. C. NOBLE.

CAR FENDER.

APPLICATION FILED MAY 23, 1908.

921,443.

Patented May 11, 1909.

2 SHEETS—SHEET 1.

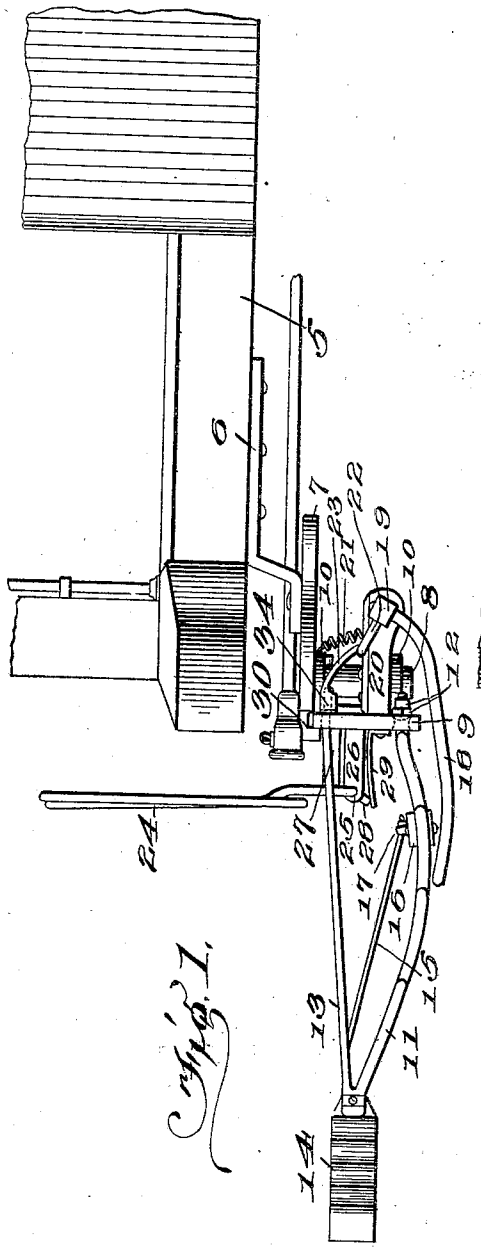


Fig. 1.

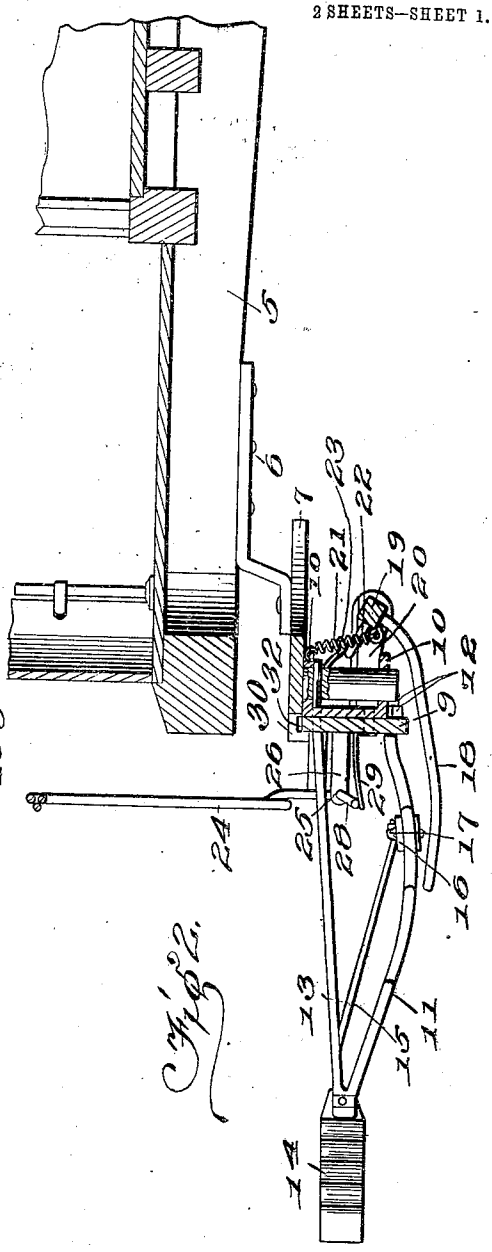


Fig. 2.

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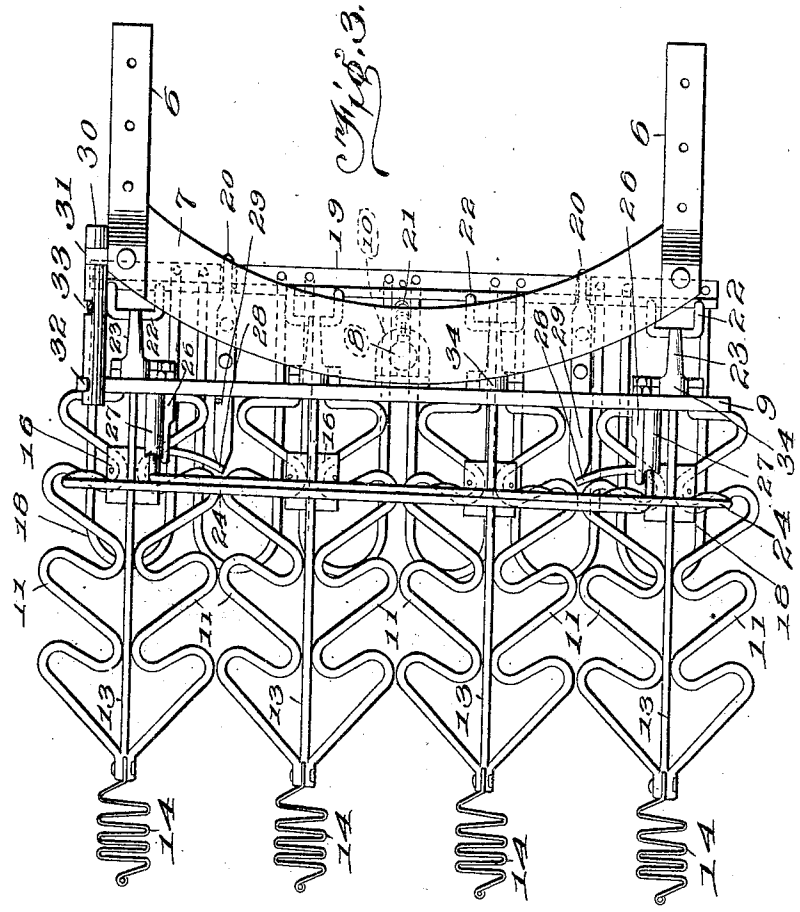
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Fig. 3.



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CAR-FENDER.

No. 921,443. Specification of Letters Patent. Patented May 11, 1909.

Application filed May 23, 1908. Serial No. 434,566.

To all whom it may concern:

Be it known that I, LEWIS C. NOBLE, a citizen of the United States, residing at 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.

This invention relates to car-fenders, and has for its object to make the fender more reliable in operation by providing a scoop which is automatically lowered if the main fender fails to pick up the person or object it encounters.

A further object of the invention is to provide a fender which can be swung beneath the car out of the way when not in use.

The invention also has for its object to provide a guard for preventing the person or object from striking the car-front. This guard can be folded on top of the fender and swung therewith beneath the car.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is an elevation, only so much of the car being shown as will suffice to show the connection of the invention therewith. Fig. 2 is a longitudinal section. Fig. 3 is a plan view.

Referring specifically to the drawings, 5 denotes the car-body to the bottom of which, near its front end, are secured brackets 6 to which a curved beam 7 is fastened. The beam carries a depending stud 8 to which the fender is pivoted. The fender has a transverse supporting-beam 9 to the back of which are secured ears 10 having alined openings to receive the stud 8 whereby a pivotal support for the fender is had.

The main fender comprises a series of fingers 11 each of which is carried independently by the beam 9 and extends forwardly therefrom. Each finger comprises a pair of sinuously bent rods which pass through openings in the beam 9 and are secured thereto by nuts 12 screwed on the rear ends of the rods behind the beam. The rods pass loosely through the openings in the beam so that the fingers can raise when passing over a person or other object. The rods are connected at their front or outer ends, and to said ends are also secured rods 13 which pass loosely through openings in the beam 9 above the openings through which the fender-rods pass. To the front end of the fender-fingers are secured forwardly projecting springs 14 which serve to prevent the points of the fingers striking and injuring the person.

Each fender-finger is braced by a rod 15 connected at one end to the rod 13 near its outer end, and at the other end to a block 16 secured to the finger. In the bottom of the block are grooves to receive the fender-rods, and on the top of the block is a lug 17 to which the rod 15 is fastened. The block 16 also serves to stiffen the fender-fingers.

The auxiliary fender comprises a scoop 18 consisting of curved wires which are connected at their rear ends to a rock-shaft 19 journaled in bearing-arms 20 extending rearwardly from the beam 9. The auxiliary fender is held normally in elevated position by means of a spring 21 connected at its ends to said fender and to one of the ears 10.

The auxiliary fender is adapted to be automatically lowered if the main fender fails to pick up the person or object. The following mechanism is employed for this purpose: To the rock-shaft 19 are secured loop-shaped projections 22 which extend into the path of downwardly curved fingers 23 carried on the rear ends of the rods 13. The parts operate as follows: Upon any one of the main fender-fingers being elevated by a person or object getting beneath the same, the finger 23 engages the projections 22 and rocks the shaft 19 in a direction to lower the scoop so that the person or object will be picked up thereby and is thus rescued from getting beneath the car truck or wheels. The main fender-fingers are light and swing freely in their bearings, and each finger acts independently so that very little force is required to lift the main fender and bring the auxiliary fender into action and there is no danger of injury to the person by the main fender. The operation of the auxiliary fender is also assured irrespective of the position of the body or object beneath the main fender.

To prevent a person picked up by the main fender from striking the front of the car, I provide a wire frame 24 which is pivoted at its lower end as indicated at 25 to bearing-arms 26 projecting from the beam 9. The swing of the frame rearwardly or in the direction of the car-body is limited by stops 27 projecting from the beam 9. The guard-frame 24 can be folded down on the fender and as the latter is pivoted to the beam 7, the entire fender mechanism can be swung beneath the car when not in use. At the lower

end of the guard-frame are lateral projections 28 which engage spring-fingers 29 for holding the guard-frame in either folded or raised position by the spring pressure of said fingers on the projections, when the frame is swung in either direction beyond center.

The fender is locked to the beam 7 by a latch comprising a plate 30 hinged at 31 to one end of the beam 7 and having a notch 32 adapted to be extended over the edge of the beam 9. A second notch 33 is provided which engages the beam 9 when the fender is swung beneath the car. The rods 13, behind the beam 9 have shoulders 34 which limit the downward swing of the main fender-fingers.

In the drawings the fender is shown in connection with a car but it will be understood that it may also be applied to automobiles and other vehicles.

I claim:

1. A fender comprising a vertically swinging fender extending forwardly in substantially horizontal position, a rock-shaft having projections, a scoop mounted on the rock-shaft, and fingers carried at the rear end of the main fender and engageable with the projections for operating the rock-shaft to lower the scoop when the main fender is elevated.

2. A car-fender comprising a supporting-beam having openings, vertically swinging fender-fingers mounted on said beam, rods carried by the fender-fingers and passing through the openings in the supporting-beam, a rock-shaft carried by the supporting-beam, a scoop mounted on the rock-shaft, and projections on the rock-shaft extending into the path of the ends of the rods.

3. The combination with a car, of a beam secured to the bottom thereof, a fender pivoted to the beam to swing in a horizontal plane, and a latch pivoted to the beam and engageable with the fender for holding it stationary.

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

LEWIS C. NOBLE.

Witnesses:
ELMER C. RICHARDSON,
LOUISE C. ARENTGEN.