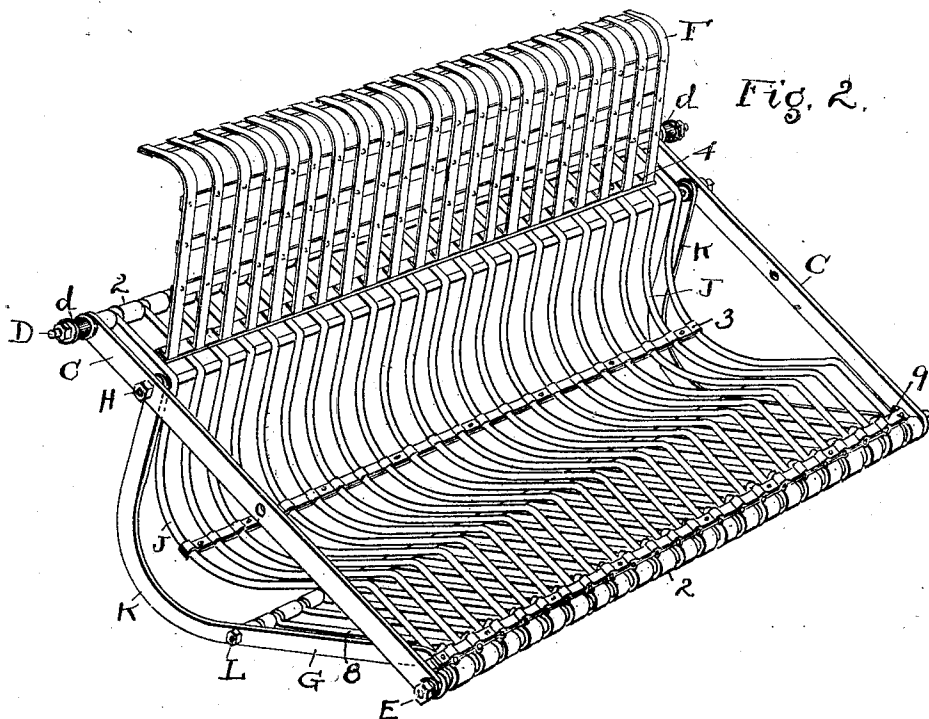
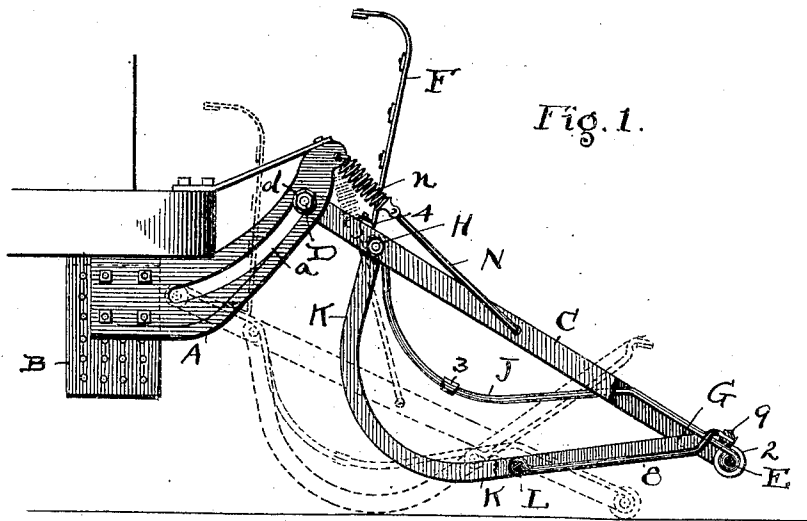


No. 837,801.

PATENTED DEC. 4, 1906.

F. CUSHMAN.
CAR FENDER.

APPLIOATION FILED JULY 31, 1905. RENEWED MAY 14, 1906.



ATTEST

R. B. Moser
C. A. Sell.

INVENTOR,

Frederick Cushman
By H. J. Fisher
ATTY.

UNITED STATES PATENT OFFICE.

FREDERICK CUSHMAN, OF CLEVELAND, OHIO.

CAR-FENDER.

No 837,801.

Specification of Letters Patent.

Patented Dec. 4, 1906.

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To all whom it may concern:

Be it known that I, FREDERICK CUSHMAN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Car-Fenders; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car-fenders; and the invention consists in a fender which is adapted to automatically shape itself into substantially the form of a basket to receive and carry a person or body thrown thereon, all substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of one end of a car body or frame and of the fender mechanism thereon with a portion of said mechanism broken away and sectioned at the front, as hereinafter described. Fig. 2 is a front perspective view of the said mechanism detached from the car, but in the same relation as shown in Fig. 1, where it is supported on the car.

The invention as thus shown belongs to the kind of fenders which are adapted to be self-convertible into something of a basket effect to receive and hold a person who may be struck by the fender and cast thereon, the idea being to mechanically confine the person on the fender rather than permit him to be thrown forward from the fender by a rebound and then crushed and ground under the car, as so often occurs.

My invention therefore belongs to that class of fenders which detain or hold a body that is once thrown thereon in such manner that it can neither be cast out by rebound or otherwise injured while being carried.

To these several ends the invention comprises suitable slotted supporting-arms A; perforated hangers B, depending from the car-body and carrying said arms; a carrier-frame C, supported in slots *a* in the said arms; a spring-buffer F, and a front pivoted guard G.

The carrier C is constituted of or with cross-rods D and E at its ends, an intermediate cross-rod H toward the rear of the said frame, and a series of wires J, running front to rear and which have straight ends in the same plane parallel to side bars C and attached at their respective ends to the rods D and E. Otherwise said rods are curved downward at their middle into a substan-

tially basket or crib form. Suitable spools or collars 2 space the said wires J at their respective ends, the front spools preferably being of rubber to cushion their stroke, and the basket is braced laterally from wire to wire by means of a suitable strap 3.

The buffer F is a spring structure arranged to stand substantially upright across the rear of the carrier and is secured thereto by supporting bar or strip 4 and is designed to have such strength and yet be of such yielding nature that when a person is thrown against it it will serve as a spring-cushion and take the impact of the body without injuring it and from which the body will drop into the basket of the carrier. However, the said basket in itself is not regarded as a sufficient precaution alone for the body to prevent it from possibly working or being thrown out over the front of the carrier, and for this reason I have provided a guard mechanism adapted to cooperate with the carrier-basket and to work as an adjunct thereto. To this end said guard consists in this instance of two curved side bars or runners K, pivoted at their rear ends upon the cross-rod H and carried at their front by the cross-rod E or the spools or sleeves 2 thereon. The said side bars K further are connected by a cross-rod L in front of their own curved or runner portion, and upon this rod are arranged a series of straight wires 8, which are fixed at their front between suitable clamping-strips 9 or their equivalent, and the said wires 8 extend forward a sufficient distance to rest over shaft E through their connecting-strips 9. It will be noticed also that said wires 8 also pass between the basket-wires J, but are entirely free therefrom in operation. Hence when the fender is carried as ordinarily on a car the operating relation of the parts is as seen in full lines in the drawings, and the guard-wires lie close down on the front of the fender-carrier; but the instant that the carrier-frame strikes an object of actuating weight, such as the body of a child or the like, the said frame is thrown rearward and downward in the slots *a* into position relatively as seen in dotted lines, Fig. 1. When this occurs, the basket J is lowered, also relatively as shown, and guard G is thrown up at its front with its wires at an angle of nearly or quite forty-five degrees inclination, thus extending the basket effect to such an elevation and width that a body caught by the said parts cannot roll out therefrom. This

action of the guard G also is simultaneous with the dropping of the carrier to dotted lines, so that if a person be thrown upon the carrier and caught initially in its basket the guard G will interpose itself automatically at the front of the basket before the body can possibly react upon a rebound from spring-cushion F. In this operation the side supporting-bars K of the carrier drop down upon the pavement or ground and slide thereon as runners, and this causes the guard-wires to assume the raised position as in dotted lines, Fig. 1. Thus the basket-carrying wires J and the guard-wires S are brought into carrying relations together and constitute the complete basket of my life-preserving fender mechanism.

In addition to the foregoing and in order that the carrier-frame C may be carried at the desired elevation for work—say in the neighborhood of three to six inches from the pavement—I provide suspending rods N or chains at the sides thereof engaged approximately at the middle of said side carrier-bars at one end and with the upper end of arms A at the opposite ends and are preferably provided with springs *n* at their top. The arms A may be adjusted to any suitable elevation upon the hangers B, which are variously perforated to provide for such adjustment.

When guard G is thrown upward at its front, the front end of the carrier-frame drops to a lower plane than before and continues to act as a fender and guard as against further obstructions in its path.

What I claim is—

1. A safety-fender for motor-cars provided with a carrier having wires bent to form a basket, and a guard member pivotally supported upon said carrier and adapted to rise to an inclined position at the front of said basket when the carrier strikes an obstruction.

2. A fender for cars comprising a carrier adapted to drop at both ends when it strikes an obstruction and to retire in its supports, and a guard pivoted on said carrier and adapted to rise to inclined position above the front portion thereof, thus serving to intercept and confine a body that may be thrown upon the carrier.

3. In car-fenders, a carrier and supports therefor upon which the carrier is adapted to drop to a lower plane and to retire within limits when it strikes an object, in combina-

tion with a wire guard pivoted on said carrier and provided with runners to ride upon the ground when said carrier is lowered.

4. In car-fenders, a suitable carrier-frame having a series of wires bent downward between their ends to form a basket, in combination with a guard-frame pivoted at its rear on said carrier-frame and having a series of guard-wires across its front adapted to take a vertically-inclined position in front of said basket when the fender strikes an object and is thrown into a protecting position.

5. In fenders for cars, a carrier-frame and a series of carrier-wires therein uniformly bent down between their ends to form a basket, in combination with a guard-frame having rocker-bars at its sides and wires across its front between said bars, said wires terminating at their rear substantially at the front of the said basket.

6. A fender mechanism substantially as described, consisting of a suitable carrier-frame provided with a wire basket substantially at its middle transversely, a guard for the fender pivoted at its rear on said carrier and having wires across its front between the wires of said basket and adapted to be raised to an inclined position at their front in respect to the wires of said basket, whereby a front guard-wall is provided for the said basket, in combination with supports for said carrier-frame having retreating slots to permit said frame to drop therein when it encounters an obstruction.

7. In car-fenders, a carrier-frame and hangers having retreating guideways in which the carrier is engaged at its rear and means to sustain the elevation of the front of the carrier from said hangers, in combination with a guard-frame having side rockers and wires between said rockers at their front and independent of said carrier.

8. In car-fenders, a carrier-frame having a series of wires running front to rear, uniformly bent downward at their middle to form a basket, a spring cushioning member standing above said carrier on the rear thereof, and a guard pivoted at its rear on the carrier and resting loosely on the carrier at its front.

In testimony whereof I sign this specification in the presence of two witnesses.

FREDERICK CUSHMAN.

Witnesses:

R. B. MOSER,

CHAS. M. KNIGHT.