(No Model.)

W. S. CLEMENT & C. F. S. MANN.

CAR FENDER.

No. 553,208. Patented Jan. 14, 1896.

Fig. 1.

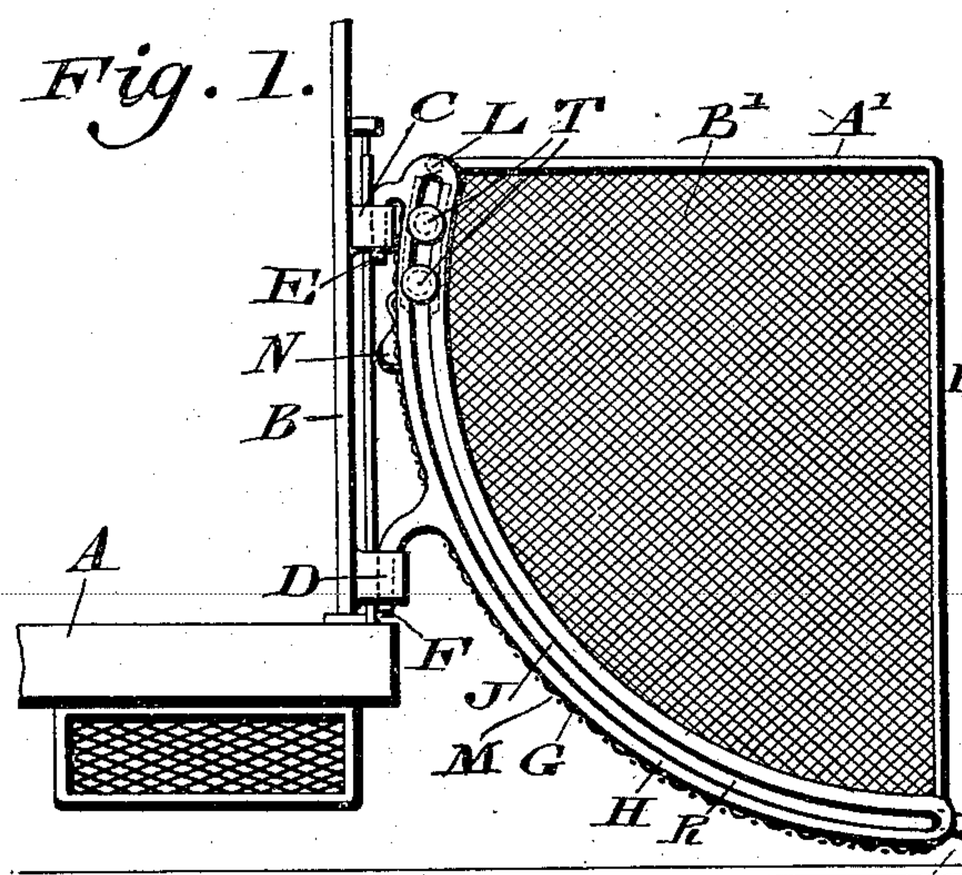


Fig. 4.

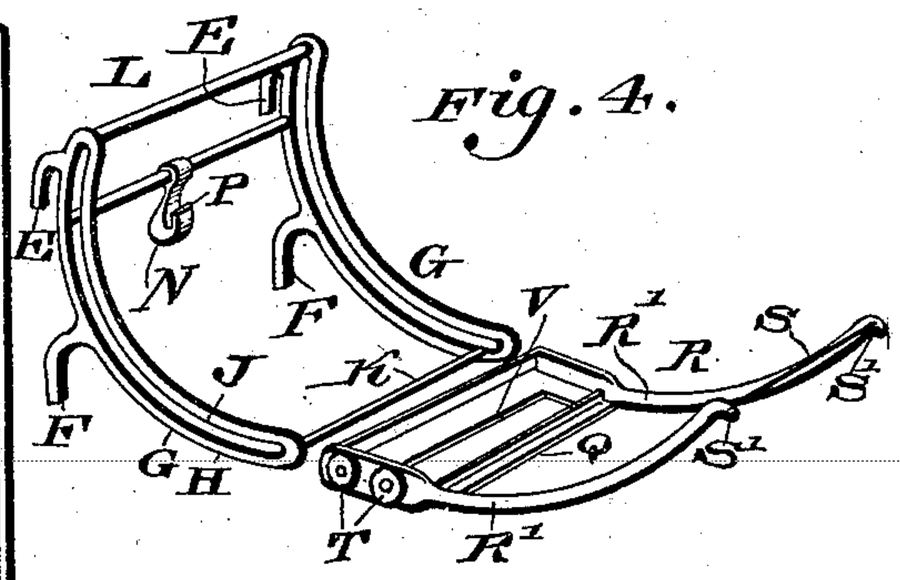


Fig. 2.

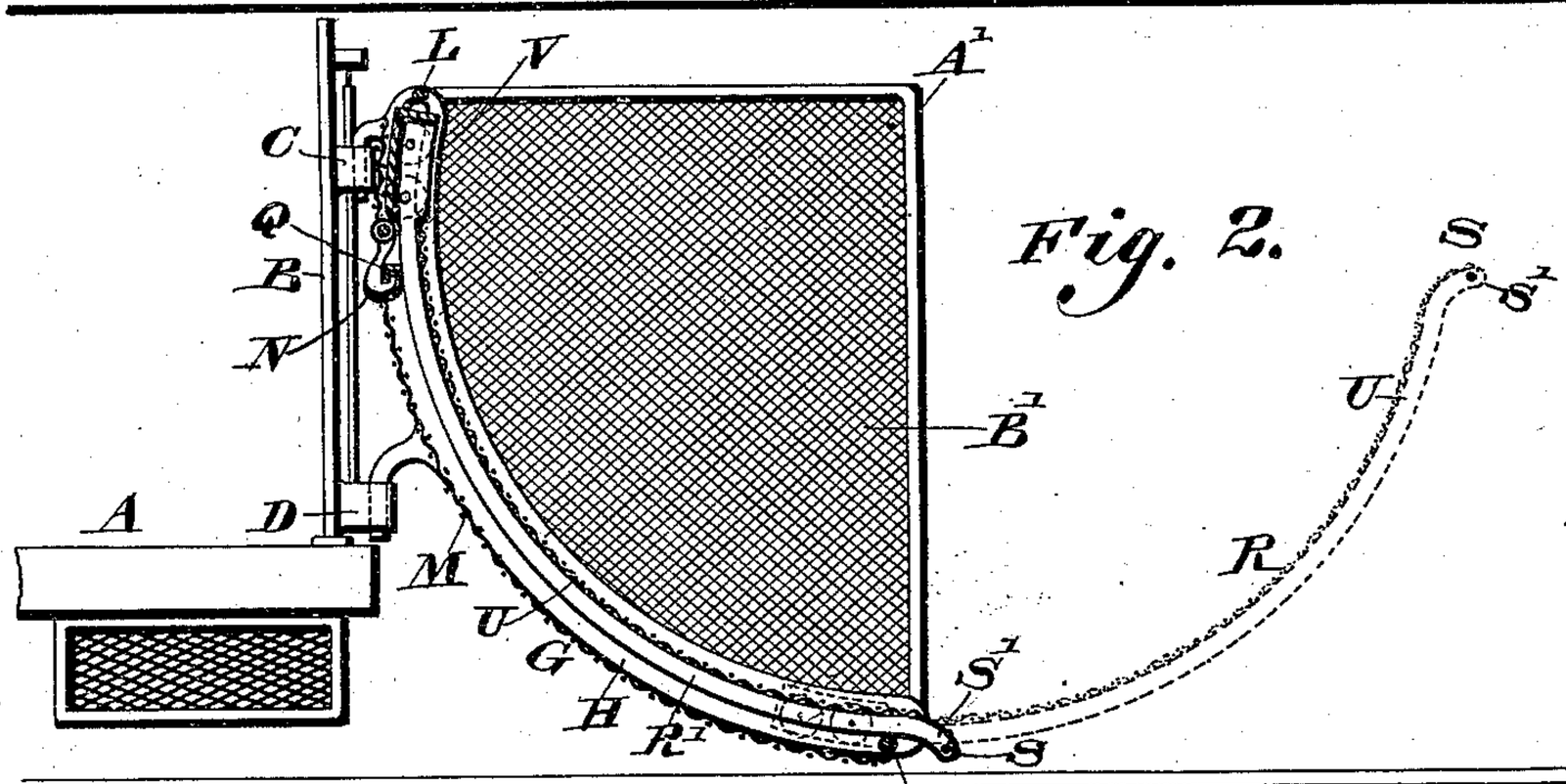
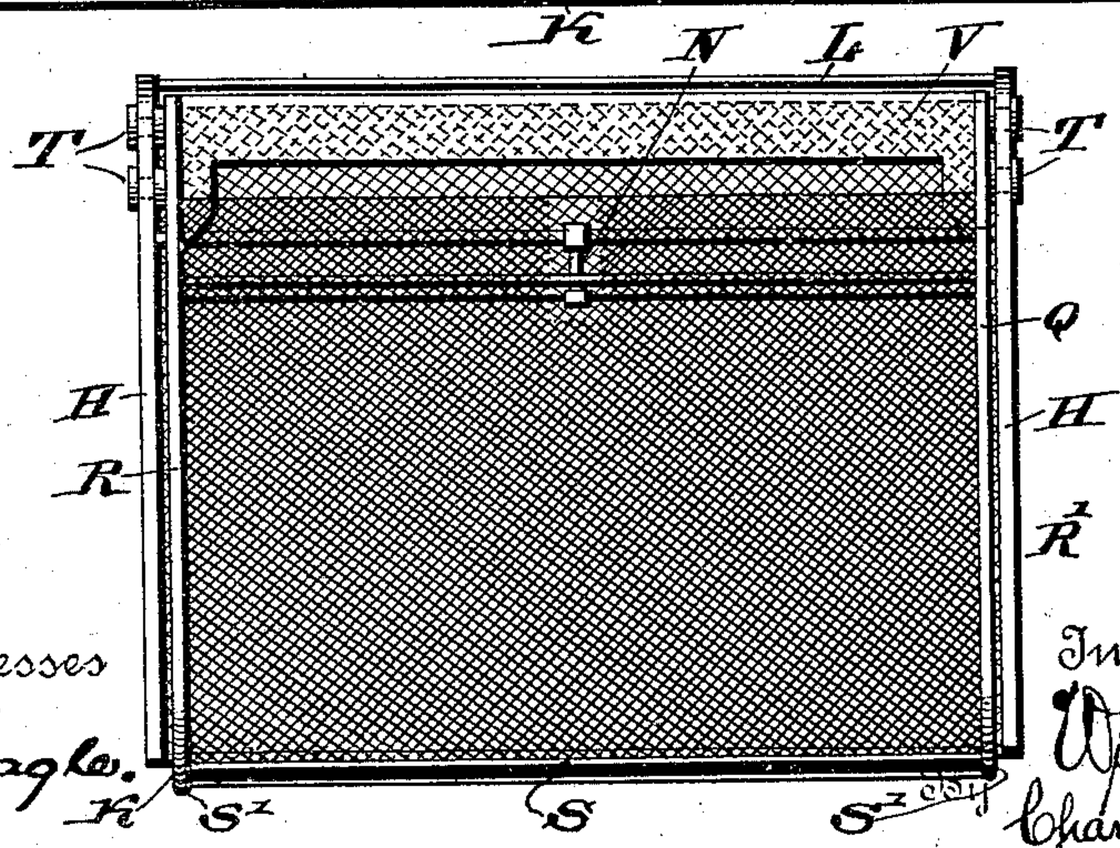


Fig. 3.



Witnesses

P. H. Eagle.

L. Douville.

Inventors.

William S. Clement.

Charles F. S. Mann

by Munn & Co

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM S. CLEMENT, OF WESTMONT, NEW JERSEY, AND CHARLES F. S. MANN, OF PHILADELPHIA, PENNSYLVANIA; SAID MANN ASSIGNOR TO SAID CLEMENT.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 553,208, dated January 14, 1896.

Application filed May 2, 1895. Serial No. 547,833. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM S. CLEMENT, residing at Westmont, in the county of Camden, State of New Jersey, and CHARLES F. S. MANN, residing in the city and county of Philadelphia, State of Pennsylvania, citizens of the United States, have invented a new and useful Improvement in Car-Fenders, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention consists of a novel construction of car-fender, in which all springs and similar devices are dispensed with, provision being made for automatically disengaging and throwing said fender into operative position on its contact with the object struck, the weight of the movable portion of said fender being sufficient to operate the same.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a side elevation of a car-fender embodying our invention and a portion of a car to which the same is applicable. Fig. 2 represents a vertical sectional view of the same. Fig. 3 represents a front elevation of the fender. Fig. 4 represents a perspective view showing the parts detached and the manner of assembling the same, the netting being removed.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a car having a dashboard B, the above parts being of the usual construction. On each side of said dashboard are attached the lugs or ears C and D, which have eyes therein which are adapted to be engaged by the hooks E and F, upon the stationary portion G of the fender the latter consisting of the curved frames H on either side, which are each provided with a curved slot J, said frames being braced and supported by means of the cross-rods K and L at the bottom and top thereof, respectively.

M designates a netting which is attached to the back portion of said frame G.

N designates a gravitating dog, which is pivotally attached to a cross-rod, and has a notched portion P which is adapted to engage a cross-rod Q of the movable portion R of the fender, the same consisting of the curved frames R′, which are connected and braced by said rods Q and S, the lower portion S′ of said frame R being curved downwardly, as will be understood from Fig. 1, so as to be but a short distance from the track when the parts are assembled in operative position. T designates wheels which are attached to the upper extremity of said curved frames R′, and which have grooves therein which contact with the walls of the curved slots J, which latter thus serve to guide and sustain the said movable frame or cradle R. U designates a suitable netting which is attached to said frame R, the latter having its upper portion, or that portion which is uppermost when the parts are in operative position, provided with a weighted portion V, so that when the catch N is disengaged from the cross rod or bar Q, the force of gravity will cause said frame R to assume the position seen dotted in Fig. 2.

The operation is as follows: When the parts are in their normal position, they appear as seen in full lines in Fig. 1, the weighted portions V being uppermost near the hooks E, while the curved portion S′ is a short distance above the track. If now an object is struck by any portion of the movable frame R, the tendency will be to slightly raise said movable frame, and to thereby disengage the dog N from the cross-bar Q, whereupon said dog will swing backwardly by gravity toward the dashboard B, its normal position, which is rearward from or out of the path of said cross-bar, and the frame R being unsupported, will fall or slide downwardly and the weighted portions V thereof will cause it to assume the position seen dotted in Fig. 2, the person or object struck being thus caught up within the substantially semicircular cradle thereby formed, and prevented from rolling out and incurring serious injury.

We desire to call especial attention to the fact that no springs are employed to throw the fender into or out of operation, and that the same can be readily applied to the dashboard of a car without necessitating any alteration thereof and it can be readily removed when desired, as is evident.

If desired, side frames A′ having a netting

B′ secured thereto may be employed, said frames being attached to the curved frames H, but if desired the side frames and netting A′ B′ may be dispensed with, and it will also be evident that the number of dogs N may be increased as desired.

The cross-rod S may be substantially a rope or rubber hose, and it will further be evident that whatever portion of the fender is struck the cradle R will be caused to shoot downward and forward, the weight of the person therein accelerating the downward movement.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A car fender having a stationary frame, and a movable frame mounted thereon, and a gravitating dog, which latter is hung on said stationary frame and held normally rearward of an engaging part of said movable frame, so as to automatically release the latter when raised, substantially as described.

2. In a car fender, a pair of curved frames having curved slots therein, a cross bar at the top having pivotally attached thereto a suitable catch, movable frames suitably connected together and supported in the former, said latter frames having rollers mounted thereon, said rollers being adapted to work in the slots of said first mentioned frames, and a cross bar connecting said latter frames and adapted to be engaged by said catch, substantially as described.

3. The frame G consisting of the curved side portions H, having the slot J therein, the hooks E and F, the cross rods K and L, the netting M attached to said sides, the catch N pivotally attached to one of said cross rods, a weighted movable frame R consisting of the curved side portions R′, the braces Q and S, the downwardly depending portion S′, and the grooved rollers T journaled in said sides and adapted to work in said slots J, substantially as described.

4. In a car fender, a pair of slotted curved frames, means for attaching the same to a suitable portion of a car, a movable curved frame adapted to be supported and guided upon said slotted frames, and a suitable catch mounted on one of said frames and adapted to engage a cross rod on the other frame, a portion of said movable frame being weighted whereby its downward movement is accelerated when said catch is disengaged, substantially as described.

WILLIAM S. CLEMENT.
CHARLES F. S. MANN.

Witnesses:
JOHN A. WIEDERSHEIM,
E. H. FAIRBANKS.