No. 813,498. PATENTED FEB. 27, 1906.

M. E. JOHN.

CAR FENDER.

APPLICATION FILED JUNE 15, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

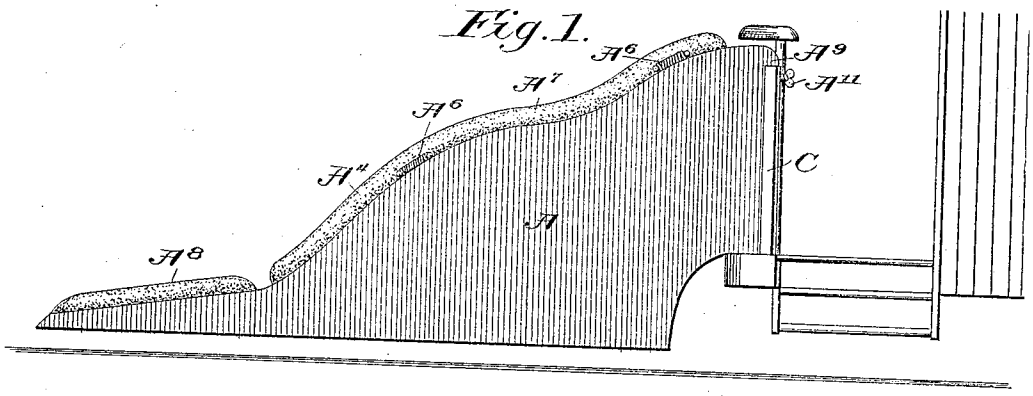


Fig. 2.

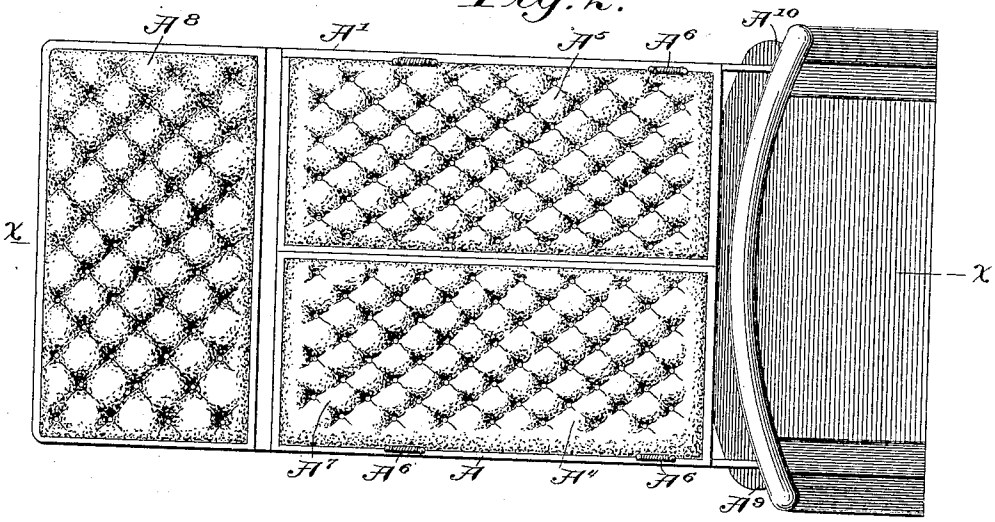
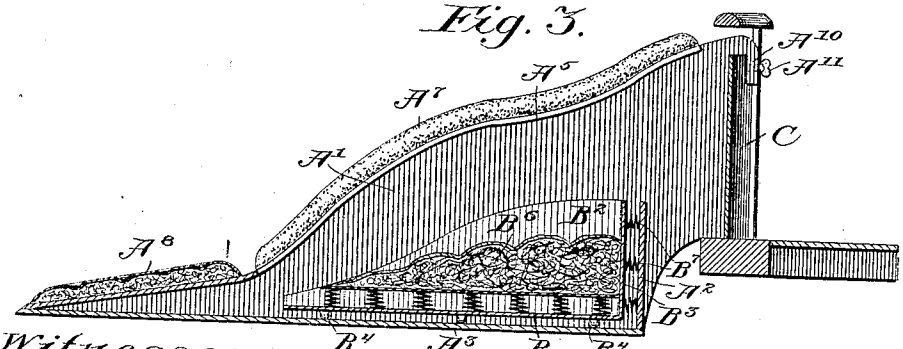


Fig. 3.



Witnesses:
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[illegible]

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2 SHEETS—SHEET 2.

Fig. 4.

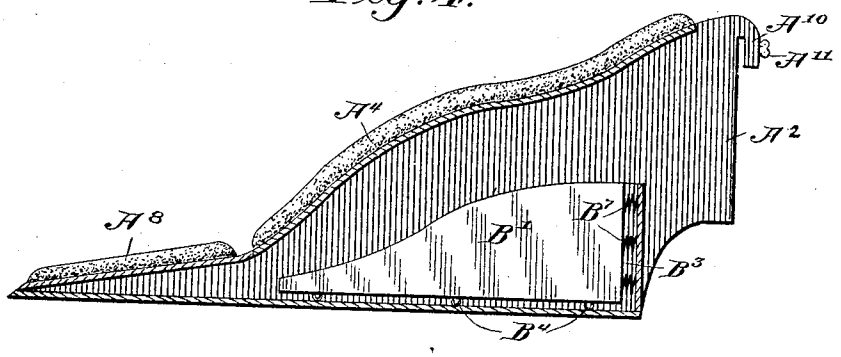
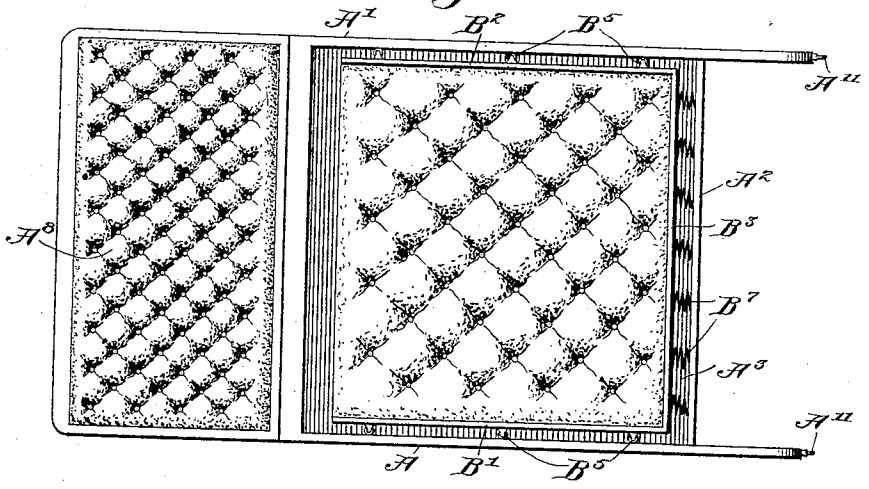


Fig. 5.



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UNITED STATES PATENT OFFICE.

MARTHA ELIZABETH JOHN, OF PORTSMOUTH, VIRGINIA.

CAR-FENDER.

No. 813,498. Specification of Letters Patent. Patented Feb. 27, 1906.

Application filed June 15, 1905. Serial No. 265,422.

To all whom it may concern:

Be it known that I, MARTHA ELIZABETH JOHN, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

My invention relates to a fender for tramcars or a life-guard for the same; and it has for its object to provide a guard or fender which will be of exceedingly simple and durable construction and which may also be applied expeditiously and conveniently to the dashboard of any car.

A further object of the invention is to construct the guard or fender in such manner that when a person is struck thereby the person will be forced to fall upon the guard or fender and in falling will be received upon padded surfaces and prevented from rolling or dropping from the fender, it being the prime object of the invention to provide a device which will receive and retain persons caught in the path of the car, receiving and retaining them in a manner which will do them no injury.

The invention consists in the novel construction and in the arrangement and combination of parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar characters of reference indicate corresponding parts in the several views, and in which—

Figure 1 is a side elevation of a portion of a car and a side elevation of the improved fender attached thereto; Fig. 2, a plan view of the guard or fender attached to the dashboard; Fig. 3, a section on the line $x\ x$ of Fig. 2; Fig. 4, a view similar to Fig. 1 with one side of the guard or fender removed, and Fig. 5 a view similar to Fig. 2 with the spring-doors of the fender removed.

In carrying out the invention the body of the guard or fender consists of side sections A A′, a back section A^2, and a base A^3. The side sections A A′ are secured to the sides of the base A^3, respectively, and their top edges are at an incline to the base and preferably of the contour illustrated, as such a contour of the top edges of the sides gives greater space within the fender than would be had by making said top edges straight. The doors A^4 and A^5 are shaped so as to follow the contour of the top edges of the sides A A′, respectively, by means of the spring-hinges A^6, which normally hold the doors at right angles to the sides A A′ and permit only an inward movement of the doors. A padding A^7 is provided on the exposed surfaces of the doors. Said doors do not extend the entire length of the sides A A′, but terminate a distance from the forward ends thereof, and that portion of the fender between the sides A A′ which is not covered by the doors is filled with a padding A^8.

Movably mounted on the base A^3 is a cushioning device, comprising a base B, sides B′ B^2, and back B^3. Said cushioning device is of a size suitable to permit inward movement of the doors A^4 and A^5 and partakes in general of the shape of the fender. Rollers B^4, mounted on the base B, permit easy longitudinal movement of the cushioning device with respect to the fender, while rollers B^5, mounted on the sides B′ and B^2, travel against the sides A and A′ and prevent any lateral movement of the cushioning device. The interior of the cushioning device is provided with a spring-cushion B^6, while springs B^7 are interposed between the back B^3 of the cushioning device and the back A^2 of the fender for the purpose of forming a buffer.

The sides A A′ terminate at the top in the hooks or clamps A^9 A^{10}, respectively, which are intended to receive the dashboard C of the car, and a set-screw A^{11}, mounted at the top of each side of the fender, may be employed to secure the hook portions A^9 and A^{10} to the dashboard. Through the medium of these hook portions the entire fender is connected with the car.

Thus in operation, if a person is struck by the forward end of the fender he will fall against the doors at an incline parallel thereto, and the doors opening will permit him to drop upon the cushioning device movably mounted on the base of the fender, where the force of the fall will be absorbed by the spring-cushion B^6 and the buffer-springs B^7. As the cushioning device is quite deep, the doors will close again, acted upon by the spring-hinges, without being obstructed by the body contained in the chamber of the fender, and it will thus be readily seen that in addition to the person being prevented from sustaining any injury by contact with the fender the person will be unable to do himself damage by leaping or falling from the car while it is in motion, since for the time he is practically imprisoned. The advantage of having the

doors A^4 A^5 at an incline to the base A^3 resides in the fact that by such a construction it will be impossible for a person falling to hit the sharp edges of the doors, and thereby sustain injury, as would be the case if the doors were constructed perpendicular to the base.

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

1. A safety-fender for cars comprising a body having a suitable base, adapted for attachment to the front of a car and provided with a chamber normally closed by spring-controlled doors arranged at an incline to the base of the fender and a cushioning device movably mounted in said chamber.

2. A safety-fender for cars comprising a body having a suitable base, adapted for attachment to the front of a car and provided with a chamber normally closed by spring-controlled doors arranged at an incline to the base of the fender and a cushioning device mounted in said chamber and movable therein longitudinally of the fender.

3. A safety-fender for cars comprising a body having a suitable base, adapted for attachment to the front of a car and provided with a chamber normally closed by spring-controlled doors arranged at an incline to the base of the fender and a cushioning device mounted in said chamber movable therein longitudinally of the fender and means for guiding said cushioning device during longitudinal movement.

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

MARTHA ELIZABETH JOHN

Witnesses:

MILDRED ROBINSON,

C. T. PHILLIPS.