

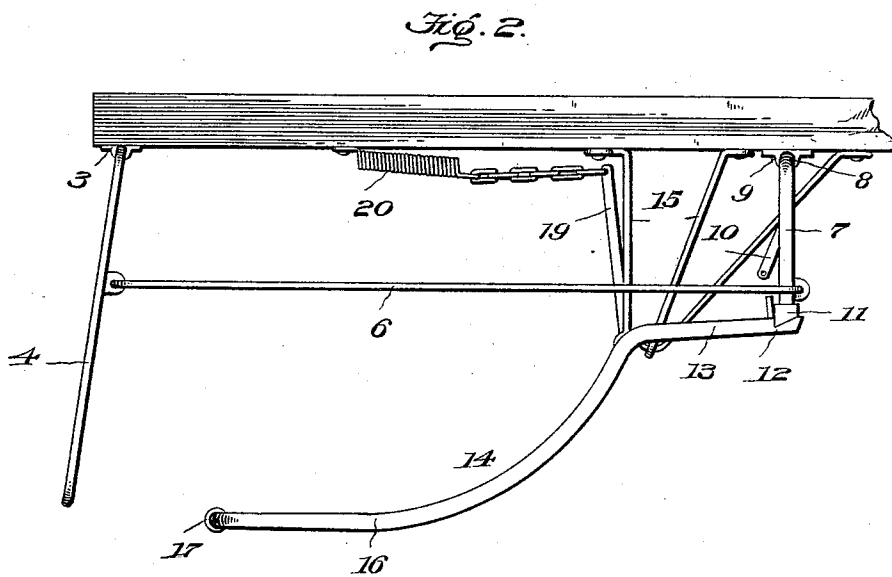
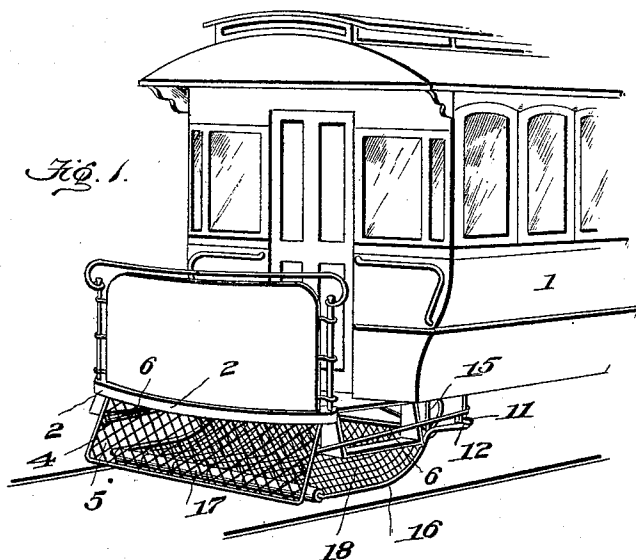
(No Model.)

2 Sheets—Sheet 1.

H. A. BENSON.  
CAR FENDER.

No. 538,721.

Patented May 7, 1895.



Witnesses:

*Wm. O. Ashiey*  
*May C. Moore*

*Henry A. Benson*  
Inventor

*Wm. Moore*  
Atty.

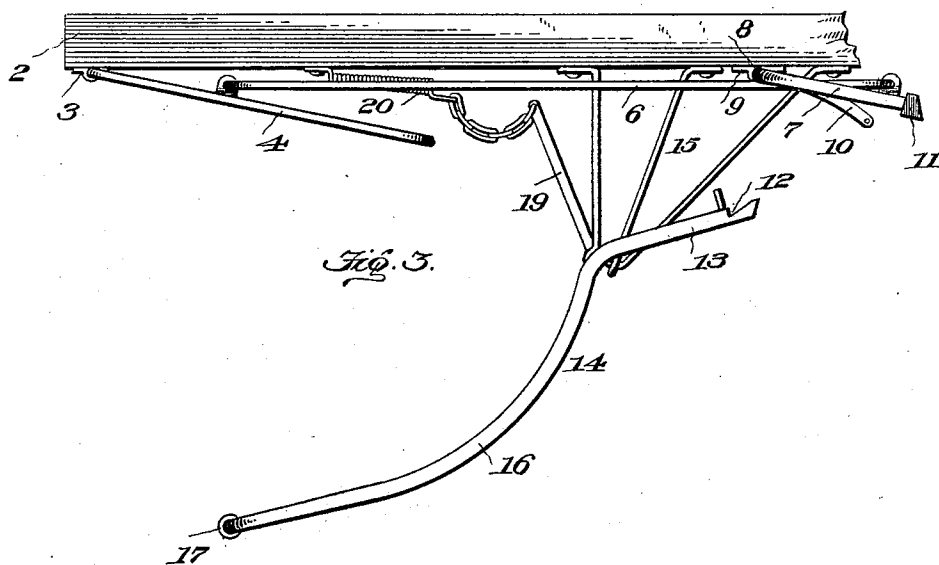
(No Model.)

2 Sheets—Sheet 2.

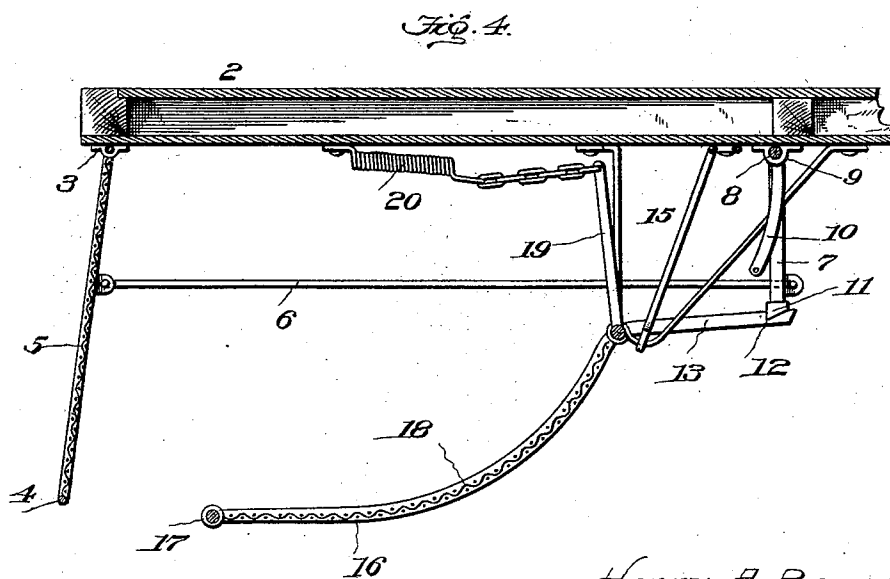
H. A. BENSON.  
CAR FENDER.

No. 538,721.

Patented May 7, 1895.



*Fig. 3.*



*Fig. 4.*

Witnesses

*Wm. D. Dashiell,*  
*May E. Moore,*

*Henry A. Benson.*  
Inventor

By *J. M. Moore,*  
Att'y.

# UNITED STATES PATENT OFFICE.

HENRY AUSTIN BENSON, OF OAKLAND, CALIFORNIA.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 538,721, dated May 7, 1895.

Application filed January 24, 1895. Serial No. 536,103. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY AUSTIN BENSON, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Car-Fenders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figure of reference marked thereon, which form a part of this specification.

My invention relates to improvements in car fenders, of that character used upon electric or other tramway cars, and the main object of my invention is the provision of a fender or guard which will positively prevent a person or any object from passing under the wheels of the car and thus avoid the horrible accidents which are daily occurring.

Another object of my invention is the provision of a guard or fender which can be easily applied to the car at a comparatively small expense; which will not disfigure or mar the appearance of the car and will occupy a small amount of space and which will be strong and durable to withstand the hard usage to which it will be subjected, thus providing a practical fender or guard.

To attain the desired objects the invention consists in certain improvements in construction and combination of parts to produce a practical, efficient and serviceable fender as will appear from the following description:

In order that the details of construction and the operation of my fender will be readily understood and its numerous advantages be appreciated I invite attention to the accompanying drawings.

Figure 1 represents a perspective view of a portion of a car with my improved fender or guard applied. Fig. 2 represents a side or end view of the fender with the parts in normal position. Fig. 3 represents a similar view with the parts in the position they assume after striking an object. Fig. 4 represents a vertical sectional view of the fender.

Referring by numerals to the drawings, the numeral 1 designates a portion of the car and

2 designates one platform thereof to the under side of which my fender or guard is applied.

In hangers or brackets 2, I mount the rectangular frame 4, composed of round rod preferably and sustaining the wire fabric 5, the structure forming what I term the apron. To the apron frame is connected the forward ends of the rods 6, the inner ends whereof are connected to the arms 7, on the shaft 8, which is pivotally mounted in brackets 9 and has the arm 10 for manually moving the shaft when setting the device. The arms 7 are provided at their lower ends with fingers or triggers 11, which engage notches 12, in the arms or extensions 13, of the scoop frame 14, which is pivotally mounted in bearings 15, suspended or depending from the car platform.

The pivoted scoop frame is curved as shown and made of round rod 16, having rollers 17 at the forward portion and the frame supports or sustains the wire fabric 18, and is further formed with the arm 19, to which is connected one end of a coil spring 20, having its other end connected to the car, as clearly shown in Fig. 4.

The operation of my device will be readily understood from the foregoing description taken in connection with the drawings and briefly stated is as follows: The parts are in their normal position and the apron extends slightly forward and the triggers connected therewith are in engagement with the scoop and hold the same a short distance above the track and in this position the car moves with the fender, and when a person or other object is on the track the apron gently contacts with them which action releases the scoop and it descends and forms a guard which holds the person and positively prevents them from passing under the fender and thus is absolutely proof against accidents. The fender also will not strike hard but has a cushion or yielding action and will not in any manner cut or bruise which is also a matter of much importance.

It is evident that the instant the fender contacts with a person the scoop will fall and form a perfect shield from injury and the simplicity and durability of my fender as well

as its appearance and efficiency are calculated to commend it as useful, necessary and practical.

I claim—

- 5 1. In a car fender the combination with the car, of the apron pivoted thereto at its upper edge, the shaft mounted in the rear of the apron and having the arms formed each with a finger or trigger at its lower end, the rods  
10 connecting the apron and arms intermediate of their ends, the pivoted scoop having the inward extending arms adapted to be engaged by the fingers or triggers; whereby when the apron is struck it moves inward and releases  
15 the triggers from engagement with the scoop to permit the same to descend.
2. In a car fender, the combination with the

car, the apron hung therefrom, the shaft mounted in rear of the apron and having the depending arms, the spring actuated scoop 20 having the arms or extensions formed with kerfs or notches normally in engagement with the arms of the shaft, and rods connecting the arms of the shaft and the apron intermediate of their ends; whereby when the apron is 25 struck the rods move and release the shaft from engagement with the scoop and the scoop descends.

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

HENRY AUSTIN BENSON.

Witnesses:

W. R. THOMAS,  
J. W. SOUTH.