

(No Model.)

C. M. BEEBE.
AUTOMATIC LIFE GUARD FOR CARS.

No. 541,466.

Patented June 25, 1895.

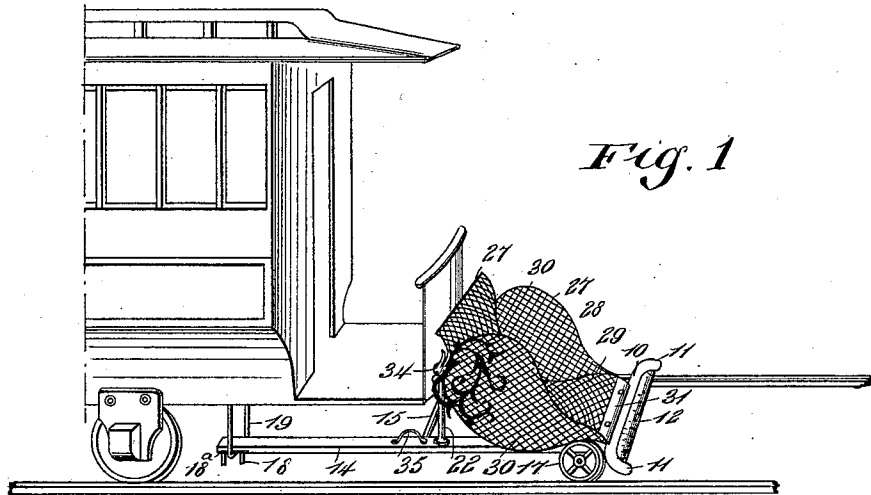


Fig. 1

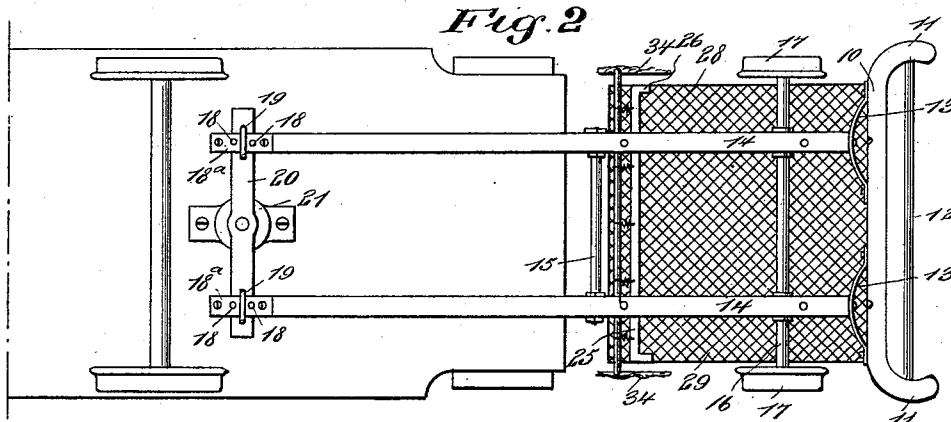


Fig. 2

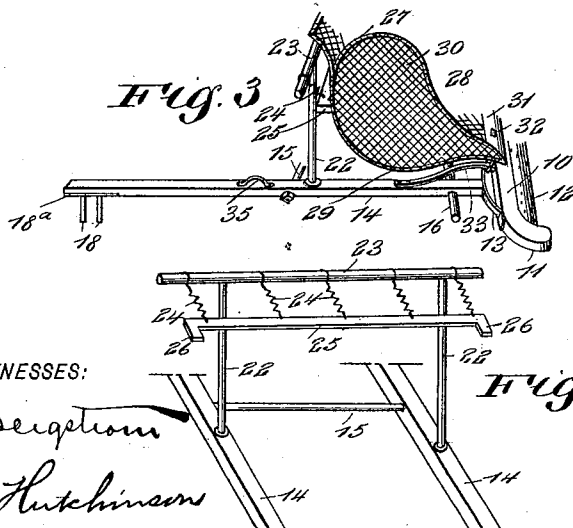


Fig. 3

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AUTOMATIC LIFE-GUARD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 541,466, dated June 25, 1895.

Application filed October 6, 1894. Serial No. 525,122. (No model.)

To all whom it may concern:

Be it known that I, CLARA M. BEEBE, of Elmira, in the county of Chemung and State of New York, have invented a new and Improved Automatic Life-Guard for Cars, of which the following is a full, clear, and exact description.

My invention relates to improvements in car fenders and similar devices which are attached to the ends of cars to prevent people from being injured or killed; and the object of my invention is to produce a simple, durable and easily applied contrivance which, when in position on the front end of the car, is a sure preventive of accidents, which is provided with a wire basket hung so elastically as to safely catch and hold any person whom the car might run down, which also is provided with a pneumatic buffer adapted to strike the limbs of a person on the track and deposit him in the basket without injury, and which may be easily shifted from one end of the car to the other.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of my improved automatic life-guard as applied to a car. Fig. 2 is an inverted plan view of the device as applied to a car. Fig. 3 is a broken detail perspective view of the automatic life-guard; and Fig. 4 is a detail perspective view of a portion of the apparatus, showing a means of hanging the basket.

The apparatus is provided with a buffer 10 which has forwardly-curved arms 11 at the ends and a pneumatic cushion 12 across the front which prevents the buffer from injuring the limbs of a person whom it strikes, while the shape of the buffer causes a person struck by it to be deposited in the basket forming a portion of the life guard, as hereinafter described.

The buffer 10 connects by means of semi-elliptical springs 13 with the buffer arms 14 which are held parallel with each other and extend beneath the car, as shown clearly in

Fig. 1, these arms being braced by cross rods 15 and 16, the latter of which is placed near the front ends of the buffer arms and it serves as an axle for the guide wheels 17 which are journaled loosely on the axle and run on the track in front of the car. On the rear ends and under sides of the buffer arms are staples 18 which are preferably formed on plates 18^a, 60 which are secured to the buffer arms, and these staples engage the loop-like hangers 19 which depend from the car and which are secured to a transverse swivel plate 20 which has a central bearing plate 21 and is fastened 65 in a suitable manner between the car timbers, the plate being pivoted in the center, as shown in Fig. 2, so that in rounding a curve the plate may turn and the apparatus carried by the buffer arm have a free movement in front of 70 the car.

The buffer arms 14 have uprights 22 secured to them which are placed in front of the dashboard of the car, and the uprights carry a suspending rod 23 from which is suspended, by 75 means of springs 24, a cross bar 25 which has forwardly-turned ends 26 and this cross bar is secured to the frame 27 of the wire basket 28, and thus supports the basket in a very yielding manner, so that a person thrown 80 violently into the basket will not be injured. The basket 28 has a curved or dishing bottom 29 and vertical sides 30, and has also an apron 31 at its front edge which is provided with holes 32 to receive the free ends of the springs 85 33, see Fig. 3, which are fastened to the buffer arms 14, and, by means of these springs, a yielding connection is made with the lower end of the basket, but the connection is sufficiently strong to hold the basket firmly in 90 place. At the sides of the basket and secured to the cross bar 23 are metal ornaments 34 which give to the basket an attractive appearance.

The buffer arms are provided with handles 95 35, see Figs. 1 and 3, which may be grasped when the device is to be shifted from one end of the car to the other, and by grasping these handles the arms may be lifted from the loops or hangers 19 and the life guard thus detached 100 from the car.

If the apparatus comes in contact with a person on the track, the cushioned buffer trips the person, who is then caught by the

wire basket 28 and, as this is hung elastically as specified, the person is uninjured and may be removed as soon as the car is stopped.

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

1. The combination, with the car and its pendent hangers, of the buffer mounted on wheels and provided with rearwardly-extending arms to engage the hangers on the car, and a basket yieldingly supported on the buffer arms, substantially as described.

2. An automatic life guard for cars, comprising a buffer having a pneumatic cushion thereon, rearwardly-extending arms mounted on wheels, hangers suspended from the car and adapted to support the buffer arms, a suspending rod carried by the buffer arms, and a basket yieldingly hung from the suspending bar and having a yielding connection with the front ends of the buffer arms, substantially as described.

3. A buffer having a pneumatic cushion thereon, arms having a spring connection with the buffer, supporting wheels for the arms, hangers beneath the car to support the arms, a suspending rod supported on the arms, a basket, a spiral spring connection between the basket and the suspending rod, and a spring connection between the front portion of the basket and the buffer arms, substantially as described.

4. An automatic life guard, comprising a

pneumatic buffer having curved springs on its back, buffer arms secured to the said springs and journaled on wheels, hangers to connect the arms with a car, and a basket carried by the arms, substantially as described.

5. The combination, with the car, of the swivel plate thereon, the hangers secured to the plate, the arms hung in the hangers and projecting forwardly therefrom, the buffer on the ends of the arms, wheels to support the front ends of the arms, and a basket carried by the arms, substantially as described.

6. The combination, with the car, of the swivel-plate thereon, the loop-shaped hangers on the plate, the arms having staples thereon to engage the hangers, a buffer on the ends of the arms, wheels to support the front ends of the arms, and a basket carried by the arms, substantially as described.

7. The combination, with the buffer arms, of the uprights thereon, the cross bar carried by the uprights, the suspending rod hung by spiral springs on the cross bar, the springs on the front portions of the buffer arms, and the basket having its rear end secured to the suspending rod and its front end connected to the springs on the buffer arms, substantially as described.

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