

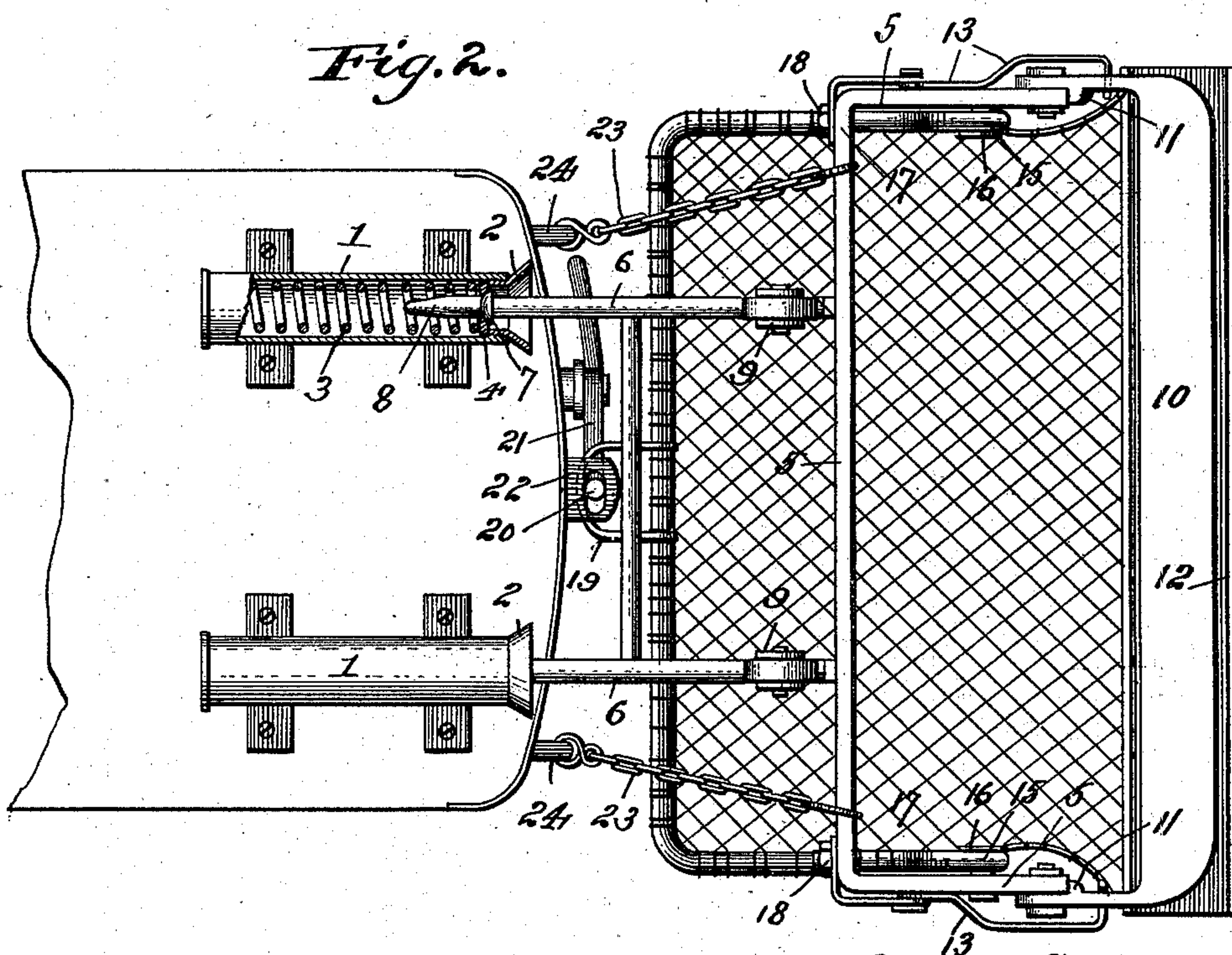
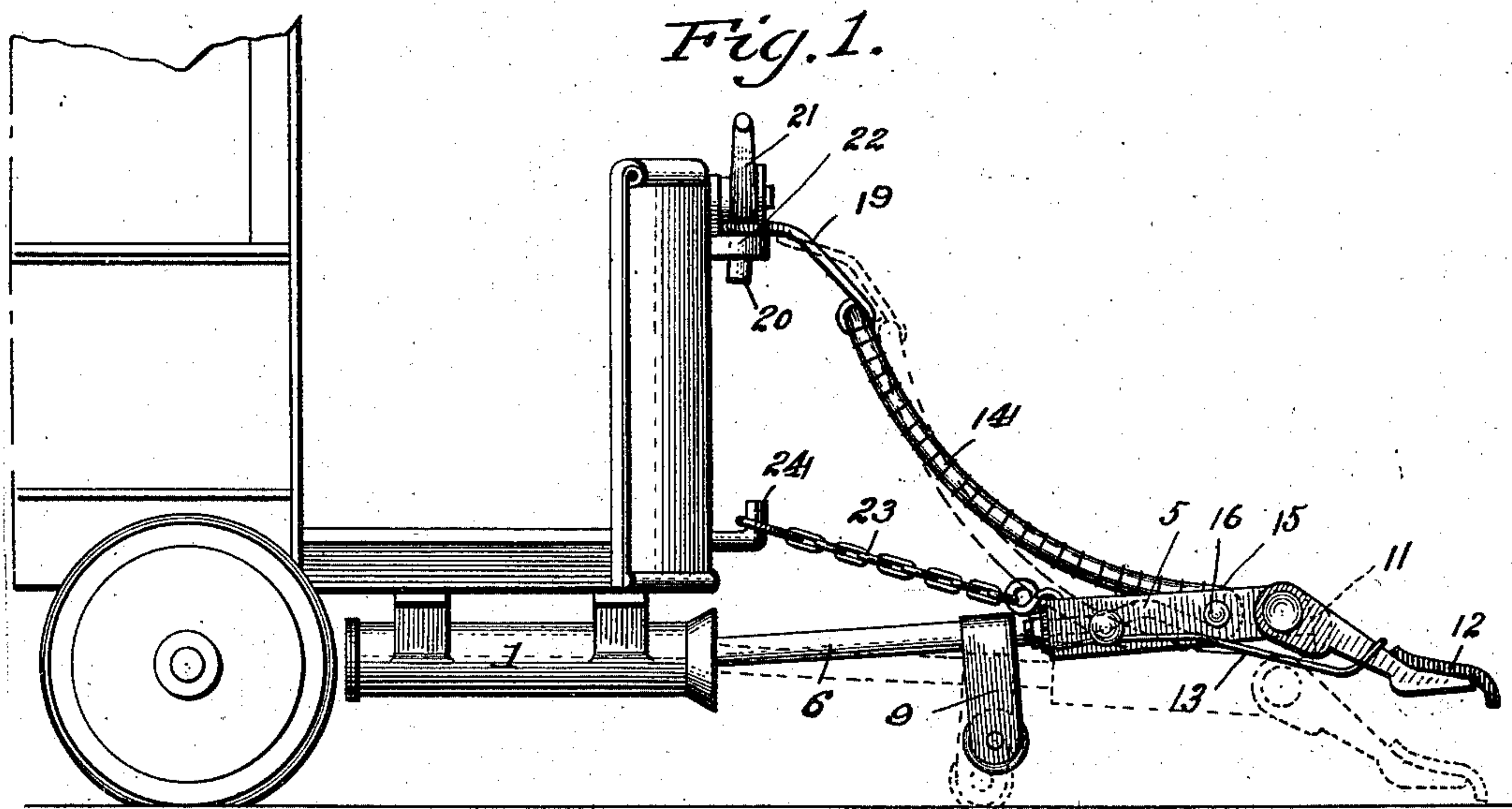
(No Model.)

2 Sheets—Sheet 1.

R. F. PREUSSER.
CAR FENDER.

No. 562,320.

Patented June 16, 1896.



Witnesses
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Chas. M. Muzzey

Inventor
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Attorneys

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

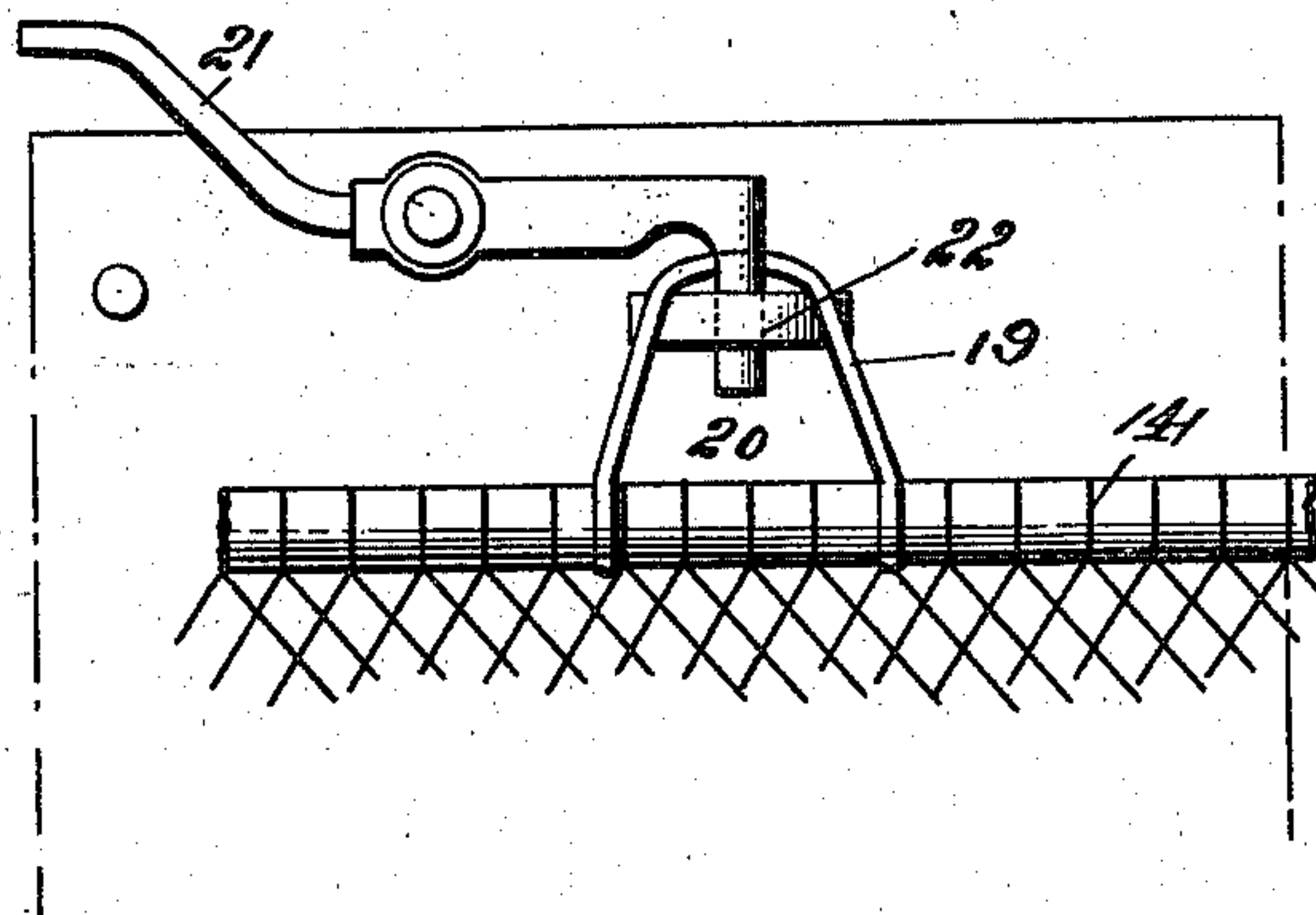
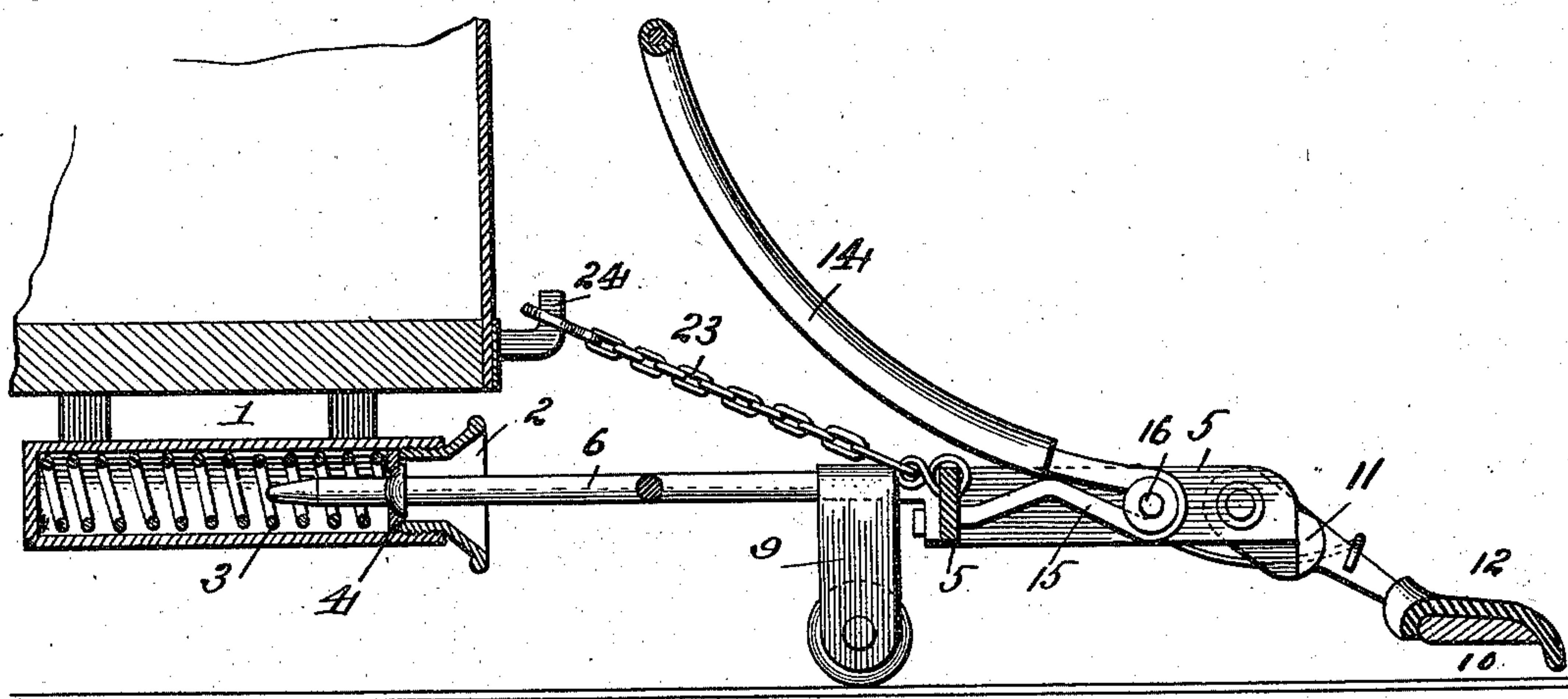


Fig. 4.

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UNITED STATES PATENT OFFICE.

RICHARD F. PREUSSER, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
OF ONE-SIXTH TO HENRY YOST, JR., AND FRANK SWANSON GIBSON, OF
SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 562,320, dated June 16, 1896.

Application filed September 5, 1895. Serial No. 561,562. (No model.)

To all whom it may concern:

Be it known that I, RICHARD F. PREUSSER, a citizen of the United States, residing at Washington, in the District of Columbia, have
5 invented certain new and useful Improvements in Life-Guards for Street-Cars, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figure 1 is a side elevation of a portion of a car provided with my life-guard; Fig. 2, a bottom view thereof, partly in section; Fig. 3, a side elevation, partly in section; and Fig. 4, a detail view.

15 This invention is designed to provide a simple life-guard attachment for street-cars, that will pick up or push aside without serious injury any person who might be on the track in front of the car while the same is in motion, as more fully hereinafter set forth.

20 In the drawings, the numeral 1 designates two cylinders bolted to the bottom of the car near its forward edge, one cylinder being secured on either side of the car and both cylinders being closed at their rear ends and
25 open at their forward ends, the open ends having flaring mouthpieces 2 screwed in them. In each of the cylinders is confined a strong coil-spring 3, whose forward end bears against a sliding disk 4, to keep the same normally pressed against the shoulder formed by the mouthpiece, and whose rear end presses against the closed end of the cylinder.
30 The main guard-frame 5 is provided with two rearwardly-extending rods 6, one of which works in each of the cylinders, each rod being provided with a stop 7, which is adapted to bear against the disk 4, the rear end of the rod itself passing through an opening in the
40 center of the disk 4. The inner surface of the stop 7 is convexed to fit within a similar concavity in the disk, in order that the rod may have a pivotal movement on said disk, and the rear end of the rods are tapered off
45 at 8 to prevent them engaging the coils of the springs when the guard-frame oscillates from side to side. Depending from each of the rods 6 is a support 9, carrying a wheel which is adapted to rest upon the car-track or road-bed when the guard is lowered for work.
50 Upon the extreme forward ends of the side

arms of the frame 5 is pivoted the transverse buffer 10, whose side arms are provided with lugs 11, adapted to abut against the forward ends of the arms of the frame and restrict the downward movement of the buffer. The buffer carries an elastic cushion 12, which extends entirely across it and is adapted to receive and cushion the blow of a body struck by the buffer. The buffer-frame is kept normally pressed downward (with its stops 11 abutting against the ends of the frame-arms) by means of two light springs 13, secured on the guard-frame and engaged over the side arms of the buffer.

60 The cradle 14 consists of a single elastic rod bent into approximately a U shape and having its ends rigidly secured to the guard-frame. The side bars of the cradle are turned under upon themselves to form the eyes 15, through which bolts 16 pass to rigidly secure the eyes to the inner sides of the frame-bars, the extreme ends of the rods being carried back and passed through the frame at 17 and bolted thereto by nuts 18. To hold the guard
70 up, I attach to the upper edge of the cradle a bail 19, which is adapted to be engaged by a pin 20, carried by the lever 21, pivoted on the dashboard within easy reach of the motor-man. The bail extends upwardly and rearwardly and rests upon a bracket 22, secured upon the dashboard and provided with an opening for the passage of the pin 20. By simply depressing the handle of the lever, the pin is raised and the bail is released, thereby
80 permitting the apparatus to drop to the road-bed and be supported upon the rollers carried by the supports 9. As is obvious, any other suitable device may be employed to hold the apparatus up out of working position. Attached to the guard-frame are two chains 23, one near each side, and both extending rearwardly and removably engaged over hooks 24, carried on the front of the car, said chains serving to attach the apparatus
90 to the car and hold its rods to their supports when the bail 19 is released, as shown in dotted lines in Fig. 1, these chains of course being sufficiently slack to permit the apparatus to fall to the road-bed.

100 It will be observed that this invention has special reference to that class of life-guards

patented to me February 19, 1895, and numbered 534,617, and that it differs from my patented construction in being more simple in construction. It will be observed that
 5 by pivotally supporting the rearwardly-extending bars upon the supporting parts 4 and keeping those parts normally pressed forward, the guard may have a limited pivotal motion vertically and at the same time a bodily
 10 rearward movement and an oscillatory movement toward either side, as in my former construction, whereby serious injury to persons picked up or struck with the fender or guard is prevented.

15 It will be observed that the springs 3 are sufficiently strong to keep the entire apparatus pressed forward and slightly upward, but are of course sufficiently elastic to readily yield should the guard strike an object in the
 20 roadway.

An essential feature is the cylinders, which inclose and protect the springs and also support and guide the same; and another feature is the manner in which the guard-frame is con-
 25 nected to the spring-actuated supports, it being simply necessary in order to detach the fender from the car to withdraw the rods from the cylinders, leaving the springs and supports in place, but first having unhooked
 30 the chains and the bail.

Having thus fully described my invention, what I claim is—

1. In a life-guard for street-cars, the combination of a pair of cylinders adapted to be
 35 attached to a car and being open at their forward ends, a spring in each of said cylinders, a sliding support working and supported in each of said cylinders and normally pressed forward by the spring, a cradle-carrying frame
 40 provided with two rearwardly-extending rods each of which extends into one of said cylinders and is connected to and passed through said sliding support and by it supported free of the cylinders, so as to oscillate independ-
 45 ently thereof, whereby said rods shall have a limited lateral movement independent of the cylinders and may be readily lifted out of the same, substantially as described.

2. In a life-guard for street-cars, the combination of cylinders adapted to be connected
 50 to the car, a sliding support working and supported in each cylinder, springs for pressing said supports forward, a cradle-carrying frame and means for detachably attaching it to the
 55 car, said frame being provided with rearwardly-extending rods working in said cylinders and passing through said sliding supports and resting removably therein and provided with stops bearing against the same,
 60 said rods working free of the springs and cylinders behind the supports and having an oscillatory movement independent of the same, as and for the purposes set forth.

3. In a life-guard for cars, the combination of a cradle-carrying frame, a buffer extending
 65 thereacross, chains connecting said frame to the car, a roller or rollers carried by the frame and adapted to support the same when lowered, rearwardly-extending rods provided
 70 with stops, open-ended cylinders receiving said rods, a spring in each cylinder, a sliding support normally pressed forward by said spring, said sliding support being engaged by the stop on the rod, as and for the purpose set
 75 forth.

4. The combination of a life-guard frame adapted to be connected to the car, and a cradle attached thereto and having its side bars
 80 formed into eyes 15, and then extended rearwardly and secured rigidly to the frame, and bolts passed through said eyes and securing the cradle to the side bars of the frame, substantially as described.

5. In a life-guard, the combination of a frame adapted to be connected to the car and sup-
 85 porting a cradle, the side bars of said cradle extending downwardly and forwardly and being secured to said frame and then turned rearwardly and secured at their rear ends to the frame, substantially as described.
 90

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

RICHARD F. PREUSSER.

Witnesses:

C. D. DAVIS,

CHARLES A. MUZZY.