

(No Model.)

2 Sheets—Sheet 1.

F. W. NYE.
CAR FENDER.

No. 561,061.

Patented May 26, 1896.

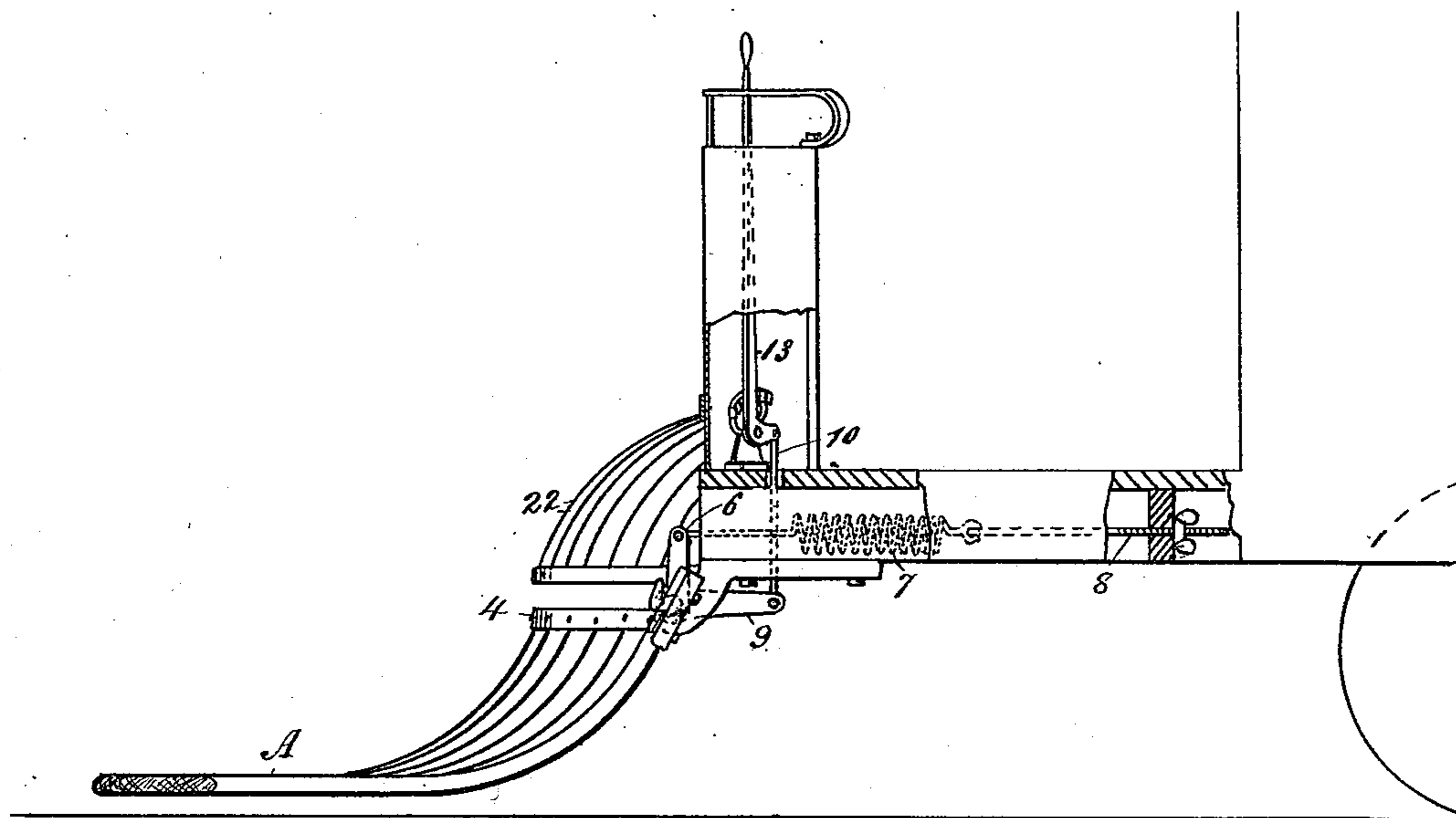


Fig. I.

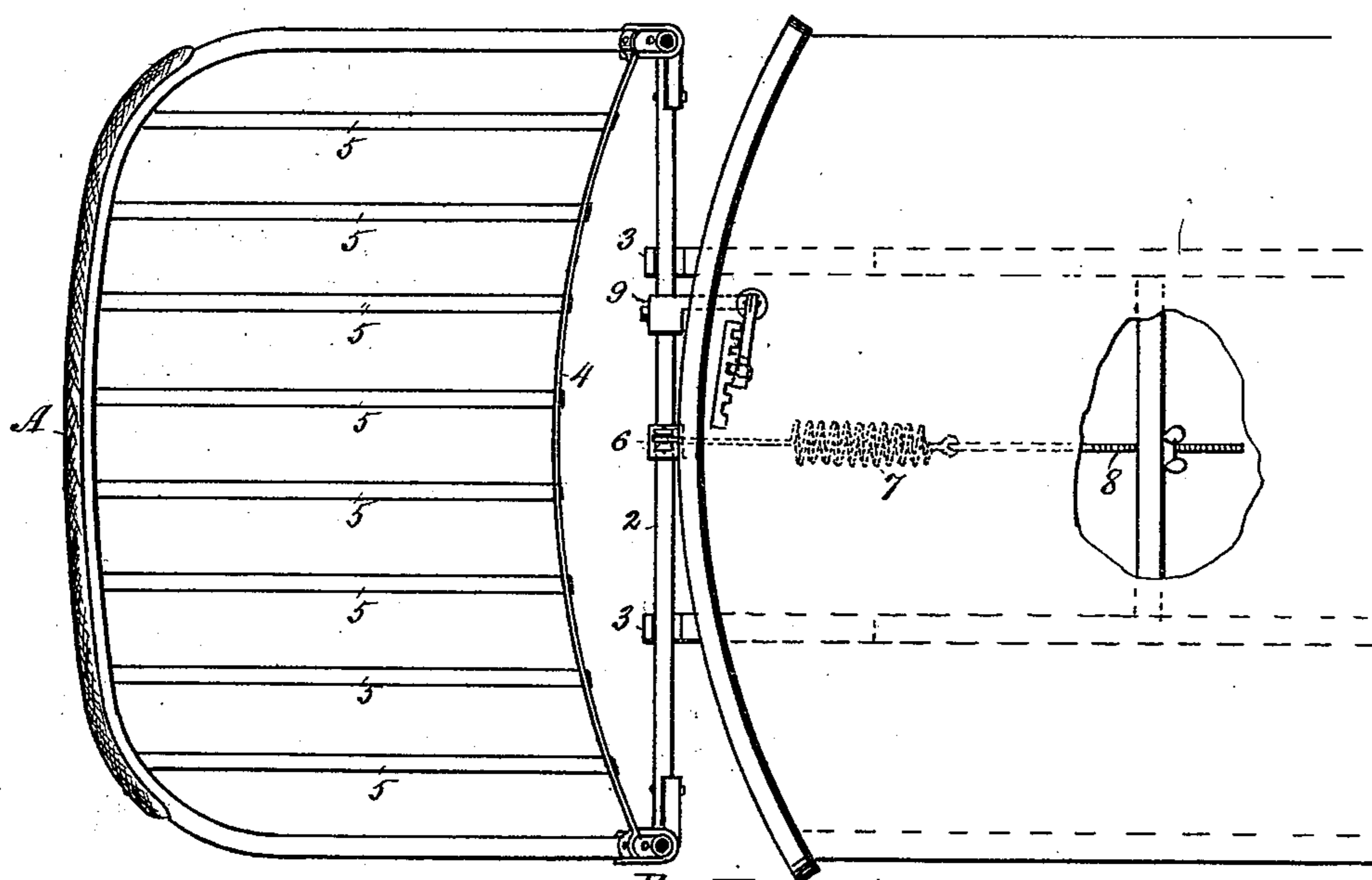


Fig. II.

Witnesses

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L. M. Adams

Inventor

F. W. Nye.

by O. Bailey Atty

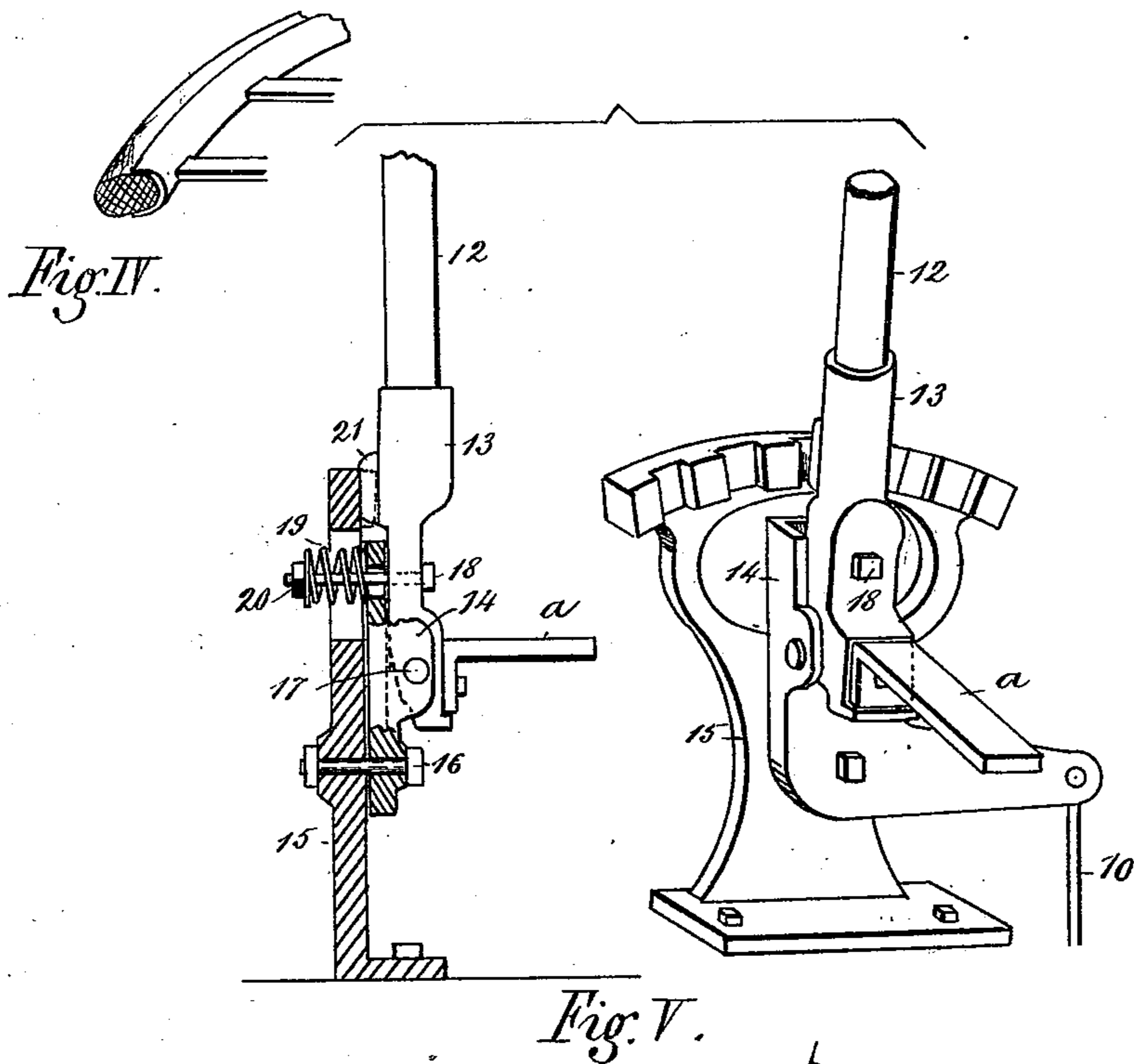
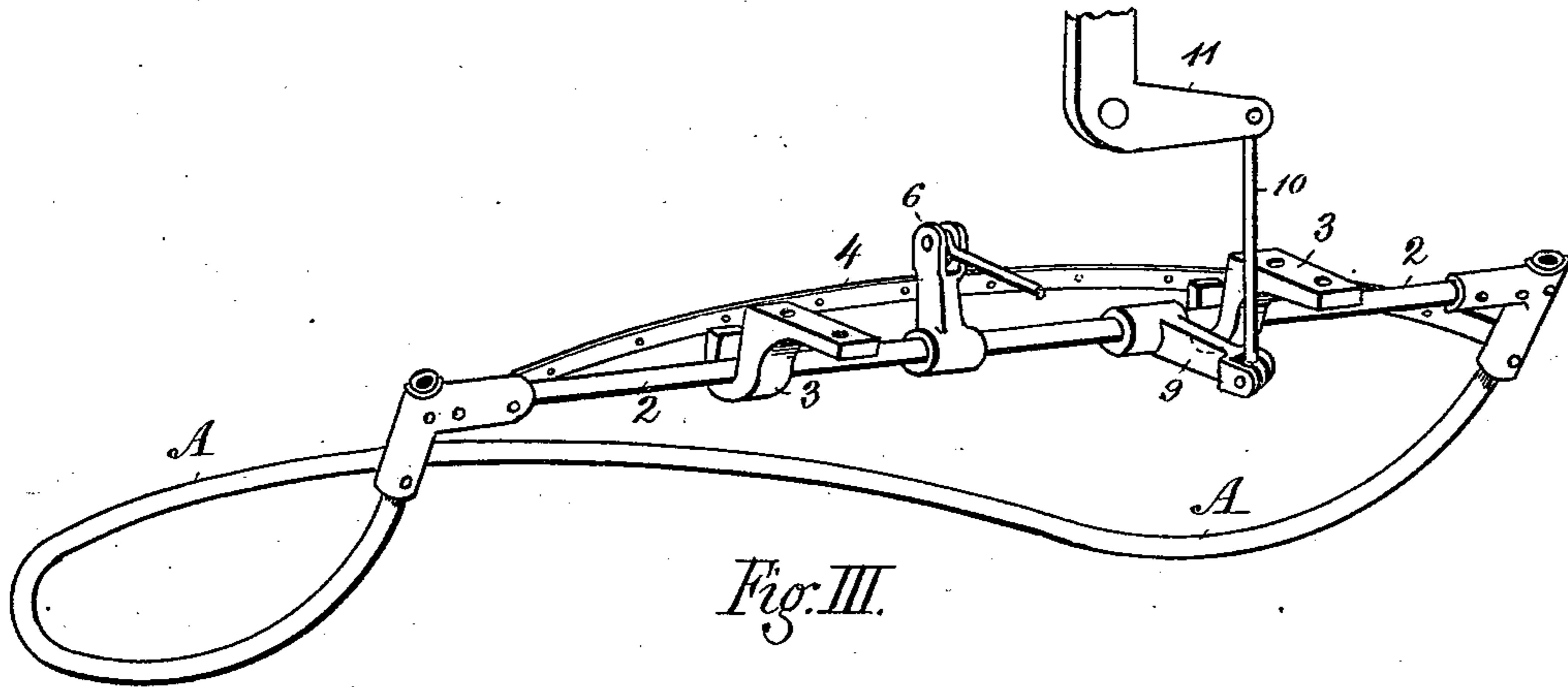
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2 Sheets—Sheet 2.

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No. 561,061.

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Witnesses
A. S. Millar
L. M. Adams

Inventor
F. W. Nye.
by Bailey & Co.

UNITED STATES PATENT OFFICE.

FREDERICK W. NYE, OF CINCINNATI, OHIO, ASSIGNOR OF TWO-THIRDS TO
H. E. YOUNG AND THOS. P. DOWNES, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 561,061, dated May 26, 1896.

Application filed February 15, 1896. Serial No. 579,366. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. NYE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Car-Fenders, which improvement is fully set forth in the following specification and accompanying drawings, in which—

10 Figure 1 is a side elevation, partly in section, of my improved car-fender; Fig. 2, a plan view; Fig. 3, a rear perspective view showing some of the auxiliary details; Fig. 4, a detail of the front bar of the fender, showing the elastic cushion; and Fig. 5, a detail showing the construction of the adjusting-lever.

My invention pertains to sundry improvements in fenders or guards specially designed for street-cars, and its purpose is to provide a device simple and inexpensive in construction and reliable in operation, which shall meet the imperative demand for adequate means to avert the accidents which are so frequent and in many instances fatal to human life.

The invention consists of an apron or basket which may be removably or permanently attached to the front of a car and adjusted at any desired inclination by suitable mechanism which is easily controlled by a motorman.

The peculiar features and advantages of the device will be understood by reference to the accompanying drawings, in which—

35 A represents a U-shaped tubular bar having its extremities vertically curved and rigidly attached to a transverse rock-shaft 2, which is suspended on hangers 3, depending from the inner longitudinal sills of the car-floor. A curved bar 4 unites the upper ends of the U-shaped frame and, in connection with a series of transverse flexible rods or straps 5, completes the basket. A vertical arm 6 is attached to the rock-shaft midway between the hangers and connects with a coiled tension-spring 7, the rear end of which is attached to a threaded stem 8 and provided with a nut, by which the tension of the spring is regulated. This spring serves as a counterbalance to the fender. A short distance

to the right of the said vertical arm 6 a rearwardly-extending arm 9 is rigidly secured to the rock-shaft, and its extremity is attached to a vertical link-bar 10, the upper end of which engages the shorter arm 11 of an angle-lever, the free end of which is within convenient reach of the motorman. This lever is preferably composed of four sections, consisting of the handle 12, the handle-socket 13, pivot-section 14, and base-section 15, to which the lower end of the pivot-section is pivoted, as at 16. The outer face of the pivot-section is recessed to receive the lower portion of the handle-socket section, to which it is pivotally attached, as at 17. The handle-socket and pivot-section are normally held in contact with the face of the base-stand by a bolt 18, the inner end of which is encircled by a coiled spring 19, adjusted by a nut 20. The upper end of the base-stand is in the form of a segment having a series of teeth which are adapted to engage a fin 21 on the adjoining face of the socket-section. It is evident that the fender may be readily adjusted and locked in any desired position by the manipulation of this lever.

In order to provide for the release of the locking-lever by foot-pressure, as may be sometimes desirable when both hands of the motorman are for the moment engaged, I attach an outstanding foot-plate *a* to the pivot-section of the lever. The release being thus effected the lever swings to a vertical position, allowing the fender to descend.

The normal operative position of the fender is close to the track, as shown in Fig. 1. Ordinary obstructions are thus removed without any action on the part of the motorman. If a human body should be encountered, it will be thrown into the basket or thrust to one side or the other. It will be observed that the fender extends the full width of the car, including the running-boards, and any obstruction, when pushed aside, cannot fall under the wheels or suffer injury from any part of the running-gear. If an inanimate object or a prostrate body should appear on the track so near at hand that the progress of the car cannot be arrested in time, the motorman can promptly elevate the fender and pass over the object.

In order to alleviate the shock and avert severe injury to the lower limbs of the person who collides with the fender, the front bar is made in the form of a clip (see Fig. 4) which incloses a rubber tube or other suitable elastic material. Dangerous injury to the head under the same circumstances is prevented by a suitable cushion 22, which extends in front of the projecting head of the draw-bar. It will also be perceived that by covering the basket with sheet metal of the proper shape it may be utilized to advantage as a snow-plow.

What I claim as new is—

1. In a car-fender, the combination with the swinging basket, the rock-shaft with which it is detachably connected, the vertical arm on said basket and the tension-spring connected therewith, of the horizontal arm secured to the said rock-shaft, the link connected therewith, the angle-lever, the upper arm of which is recessed, the base to which said lever is pivoted, the socket pivoted to said lever, the handle, the toothed segment formed with said base, the fin on the said socket engaging therewith, the bolt secured to said socket projecting through holes in the elbow-lever and base and the nut and coiled spring, substantially as described.

2. In a car-fender, the combination with the swinging basket consisting of the tubular bar having the extremities curved upwardly, the curved transverse bar secured thereto, and the flexible rods or straps secured to the front of said tubular bar and to the transverse bar, the stationary cushion located above said basket, the detachable rock-shaft, the hangers, the vertical arm and the adjustable tension-spring connected therewith, of the base secured to a car-platform having a hole therein and formed with a toothed segment, the recessed elbow-lever pivoted to said base, and formed with a hole, the socket pivoted to the vertical arm of said lever, the fin thereon engaging with the teeth of said segment, the rod or bolt secured to said socket, the nut and coiled spring, the foot-plate, the link connected with the horizontal arm of said lever, the horizontal arm on said rock-shaft and the connecting-link, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 4th day of February, 1896, in the presence of witnesses.

FREDERICK W. NYE.

Witnesses:

R. S. MILLAR,
ROBERT KIRK.