

N. F. ALSTON.

CAR FENDER.

APPLICATION FILED NOV. 5, 1908.

Patented July 27, 1909.

2 SHEETS—SHEET 1.

929,071.

Fig. I.

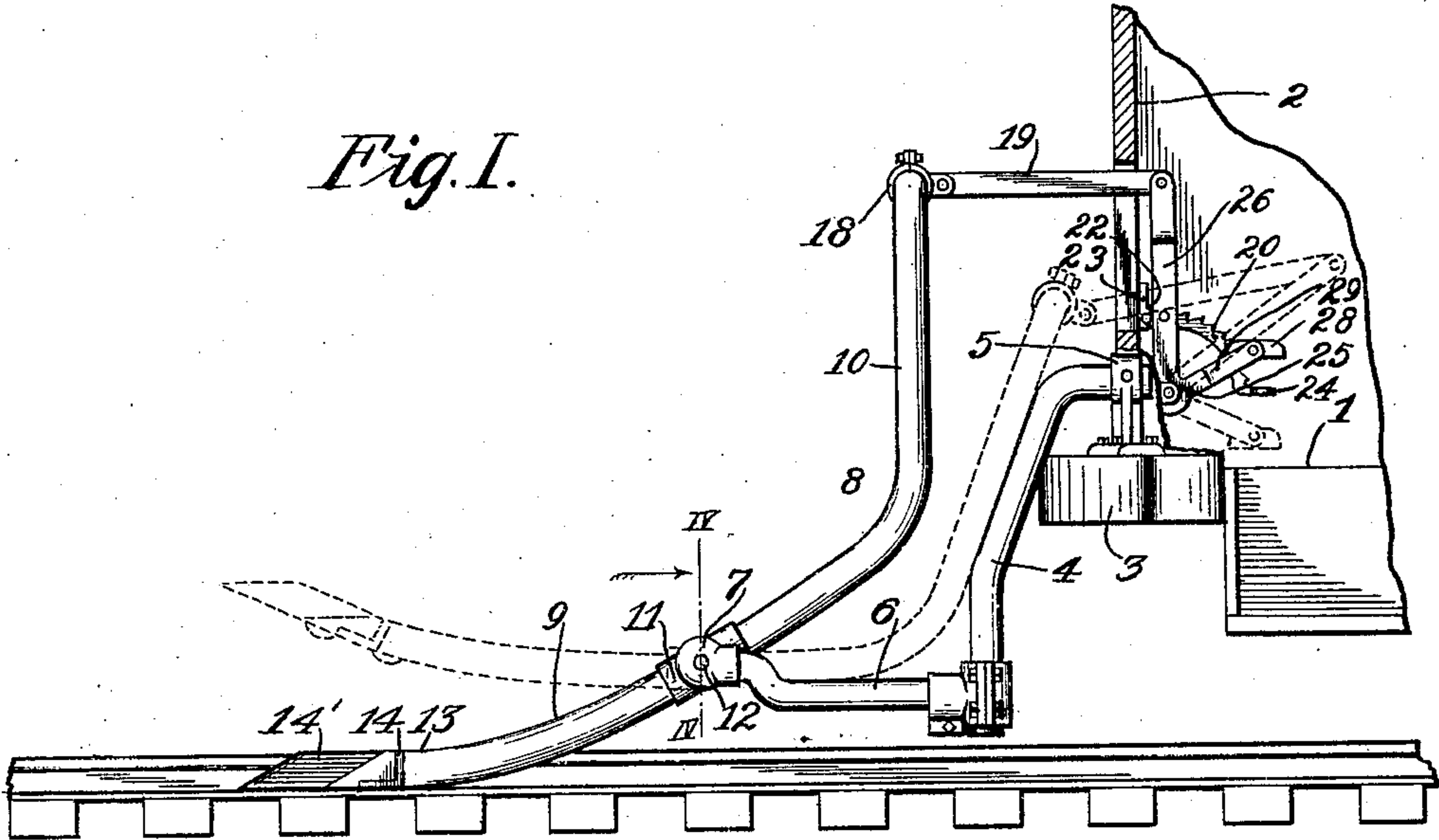
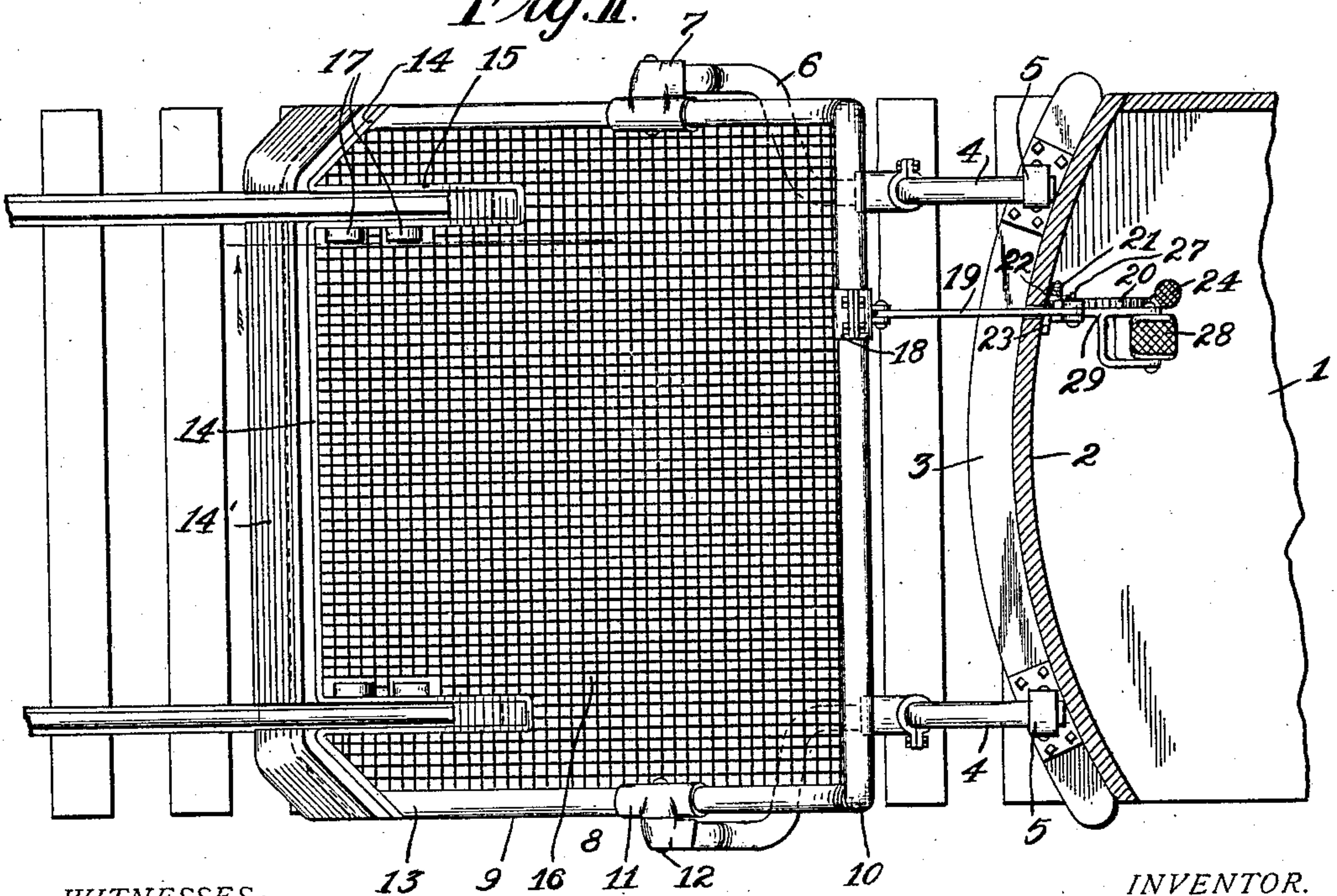


Fig. II.



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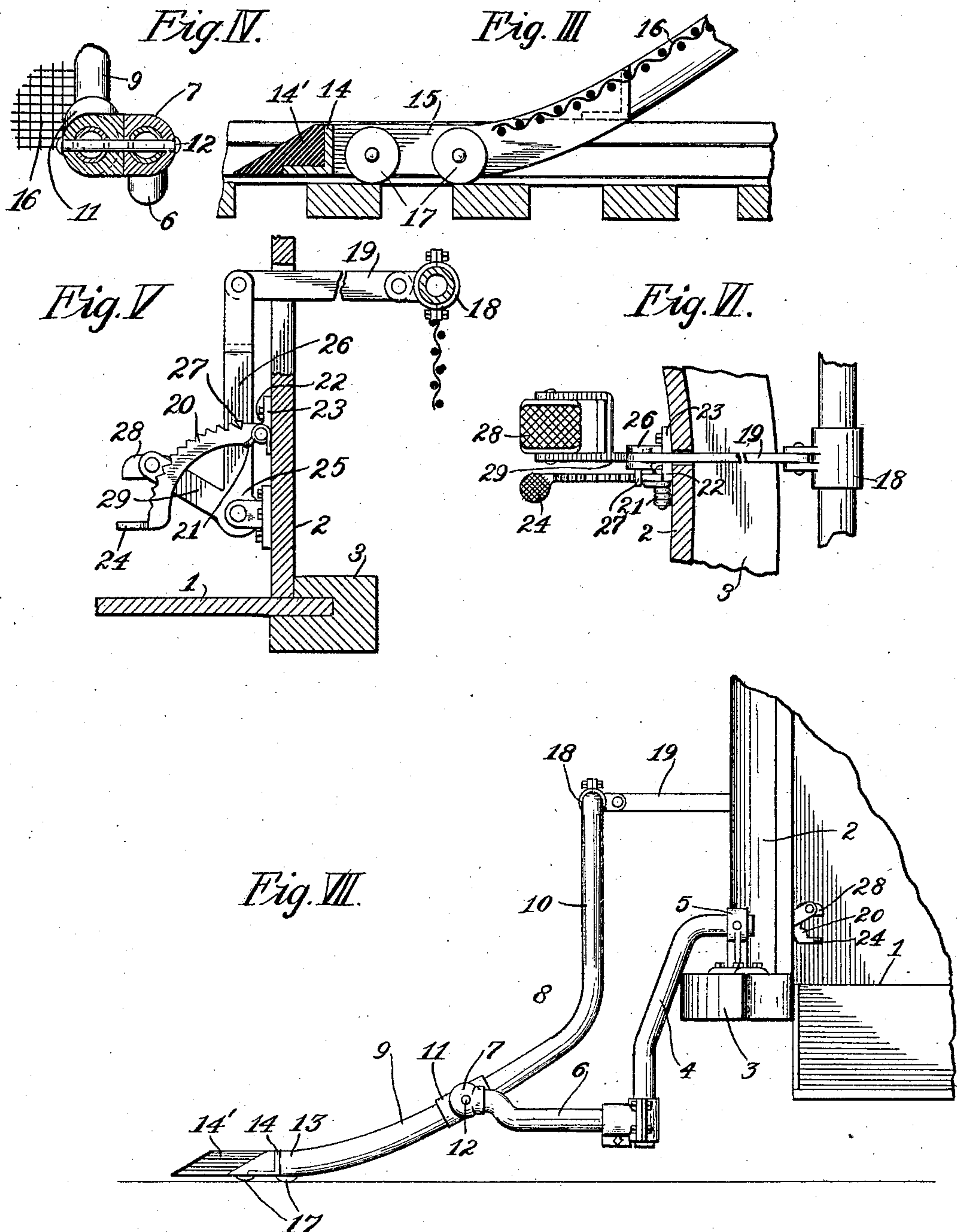
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# UNITED STATES PATENT OFFICE.

NICHOLAS F. ALSTON, OF INEZ, NORTH CAROLINA.

## CAR-FENDER.

No. 929,071.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed November 5, 1908. Serial No. 461,117.

*To all whom it may concern:*

Be it known that I, NICHOLAS F. ALSTON, a citizen of the United States, residing at Inez, in the county of Warren and State of North Carolina, 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to a car fender and has for its object to provide a device of that class which may normally be retained in an elevated non-operative position, but which may be quickly lowered to pick up a person or animal to prevent their injury by the car wheels.

A further object of my invention is to provide a fender which may travel in close proximity to the ground between the rails, and which comprises means for supporting the same above the track or railway superstructure, to prevent damage to the fender parts.

A further object of my invention is to provide other improved details of structure presently fully described and pointed out in the claims, reference being had to the accompanying drawings, in which:—

Figure I is a view in side elevation of a car fender constructed according to my invention. Fig. II is a top plan view of same. Fig. III is an enlarged detail view of the fender pickup. Fig. IV is a cross sectional view of the pivot cap and collar, on the line IV—IV, Fig. I. Fig. V is a side elevation of the operating lever. Fig. VI is a plan view of same. Fig. VII is a view in elevation of my improved fender, modified to adapt it for use on paved streets.

Referring more in detail to the parts:—1 designates the platform of a car vestibule, which is inclosed at the front by a housing 2 and has a projecting fender rail 3. Mounted on rail 3 is a fender supporting frame, comprising the hangers 4, which are suspended from the rail brackets 5 and carry the forwardly projecting fender supporting arms 6, each of which is provided, at its free end, with a pivot cap 7.

8 designates the fender frame which is preferably formed of a single piece of tubing, bent to form the side arms 9 and vertical

back stop 10, the ends of the frame terminating in a transverse plane at the front of the fender. At a suitable point on the side arms 9 are collars 11, through which, and through the pivot caps 7 on the supporting arms 6, are projected the pivot pins 12, which support the fender scoop and permit free rocking movement thereof. Each of the side arms 9 is curved downwardly and forwardly and is provided at its lower, forward end with an extended horizontal portion 13. Supported by and extending between the forward ends of the horizontal portions 13 is a rail 14 made of angle bar, having a cushion 14' of rubber, or the like, which is inclined upwardly and backwardly from its forward edge, in order that an object struck by the fender may be carried upwardly into the fender scoop, the cushion 14' yielding slightly on its impact and thereby lessening the danger of injury to a person struck thereby.

The fender frame 8 is of such width that its sides extend laterally beyond the track rails, and the fender rail 13 is cut at the points which would otherwise come in contact with the track rails, when the fender is lowered. In order that the central body of the scoop may travel between the track rails and the side sections at the outer sides thereof, a U-shaped bracket 15 is attached to the rail 14 and extended rearwardly therefrom to provide supports for the scoop parts and means to which the mesh body 16 may be attached.

17 designates rollers, which are axially mounted on the U-shaped brackets 15 and are adapted to roll on the pavement or cross ties of the track, when the fender is in its lowered position, and thereby support the forward end of the fender body out of contact with the pavement or ties, there being at least two rollers on each bracket, which are spread sufficiently to enable a forward roller to engage a forward cross tie before the back roller has left a preceding tie.

Fixed on the cross piece of the back stop 10, is a collar 18, to which is pivoted a lever link 19 that extends through the vestibule housing near the car operator's position.

20 designates a curved ratchet, which is pivoted at its upper end to the vestibule housing and is urged by a spring 21, the upward travel of the ratchet being limited by a stop 22 on the stationary pivot bracket 23.

24 designates a pedal on the lower end of ratchet 20 by means of which the ratchet



may be depressed against the tension of spring 21. Also pivoted to housing 2 is a lever 25, the arm 26 of which is pivotally connected with the link 19 and has a laterally projecting tooth 27 adapted for engagement with the teeth of ratchet 20.

28 designates a pedal on the arm 29 of lever 25, by which the lever and fender scoop may be rocked.

Presuming the fender to be applied to an ordinary street-car, in the manner described, the fender scoop will, under normal conditions, remain elevated (as indicated in dotted lines, Fig. 1), being held in this position by the engagement of the tooth 27 with one of the ratchet teeth.

When it is desired to drop the fender, the operator places his foot on the ratchet pedal 24, and depresses the ratchet against the tension of spring 21, thereby releasing the lever tooth 27 and permitting the front end of the fender to drop until the rollers 17 rest on the pavement between the track rails or upon the cross ties.

Should the front of the fender engage an object on the track, the cushion 14' will yield slightly at the impact and will be projected beneath the object so that the latter may be moved up the inclined cushion into the fender scoop.

By inclining the side sections of the fender rail backwardly, an object at the side of the rail may be pushed out of danger, and by providing a freely swinging scoop having supporting rollers, the fender may be lowered into close proximity to the ground without

danger of the front rail catching against the pavement or cross ties.

To raise the fender to normal position, the operator depresses the main pedal 28.

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

1. A car fender comprising a scoop, having a forward rail adapted for travel in close proximity to a track understructure, and rollers carried by the scoop body, said body being split over the track rails, substantially as and for the purpose set forth.

2. A car fender comprising a pivotally mounted scoop, having a forward rail adapted for travel in close proximity to a track understructure, and U-shaped brackets dividing said scoop and rail over the track rail portions, substantially as and for the purpose set forth.

3. A car fender comprising a supporting frame, a scoop pivotally mounted in said frame and adapted for automatic movement into operative position, a lever connected with said scoop and provided with a ratchet tooth and step arm, and a ratchet pivotally mounted and yieldingly tensioned toward the tooth on said lever, substantially as and for the purpose set forth.

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

NICHOLAS F. ALSTON.

Witnesses:

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E. A. CAHILL.