

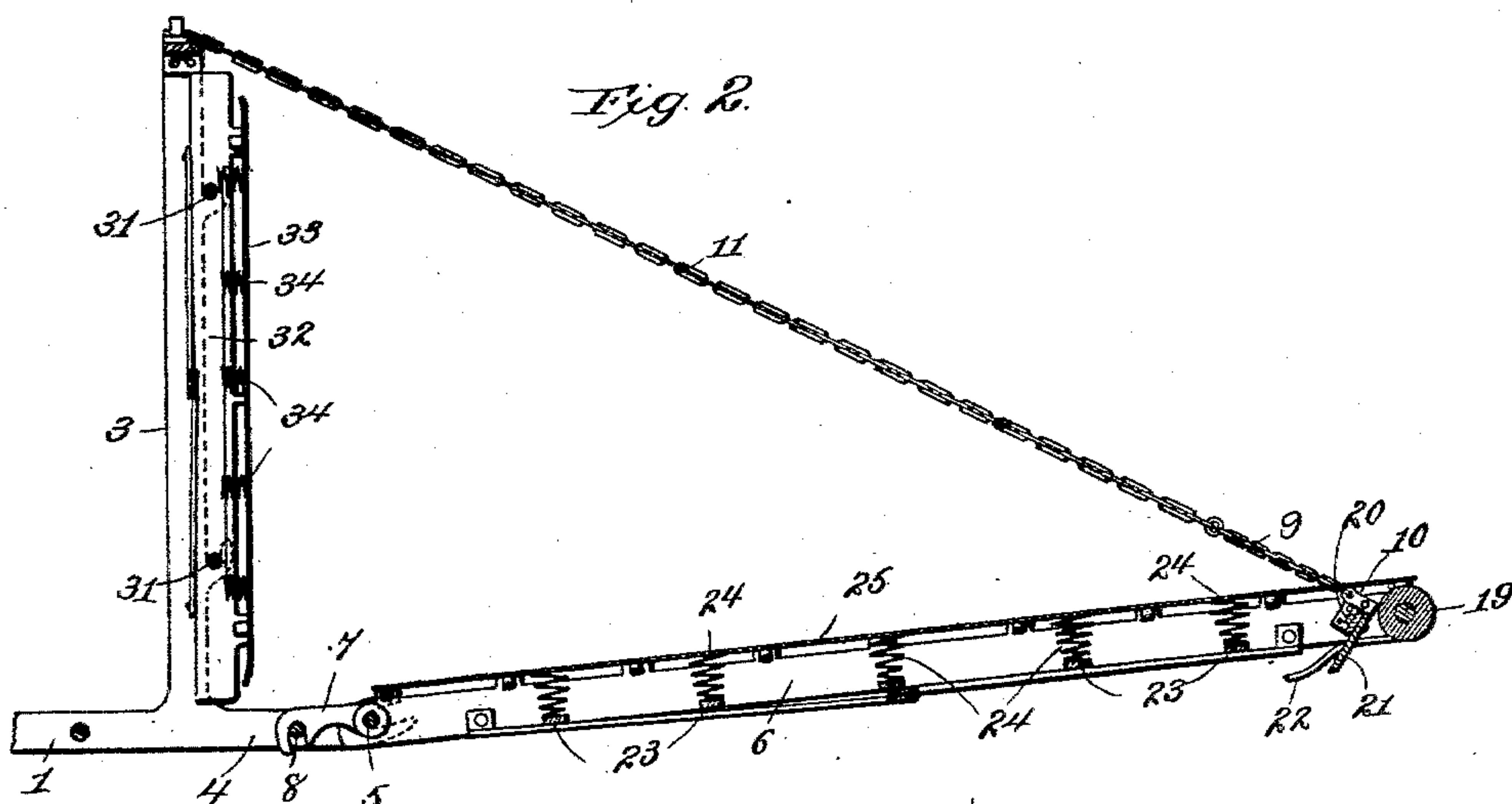
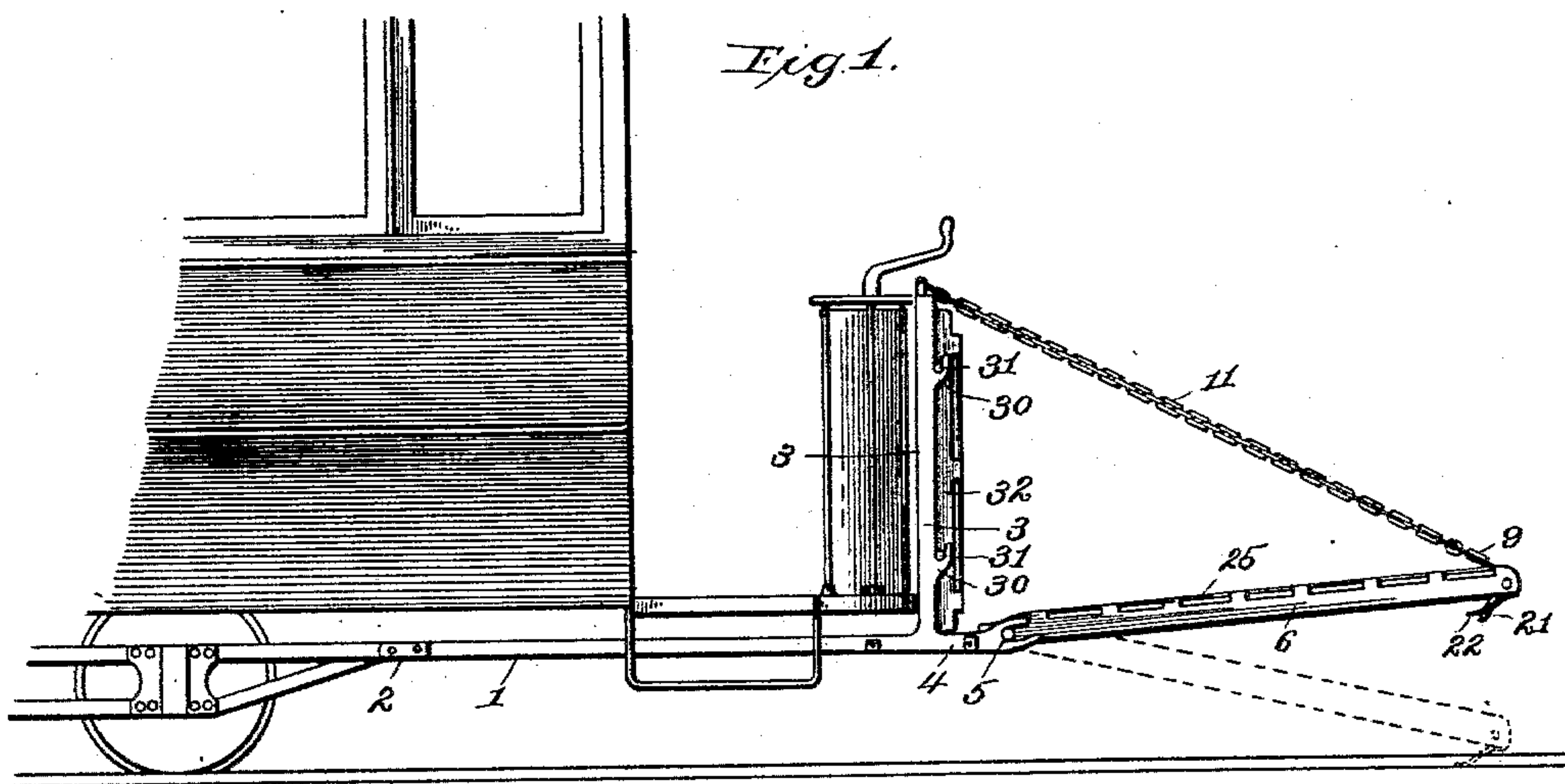
(No Model.)

2 Sheets—Sheet 1.

P. J. WATERS.
CAR FENDER.

No. 571,714.

Patented Nov. 17, 1896.



Witnesses

E. C. Dunderman
A. Williamson

Inventor

Patrick J. Waters
By Geo. H. Holgate
Attorney

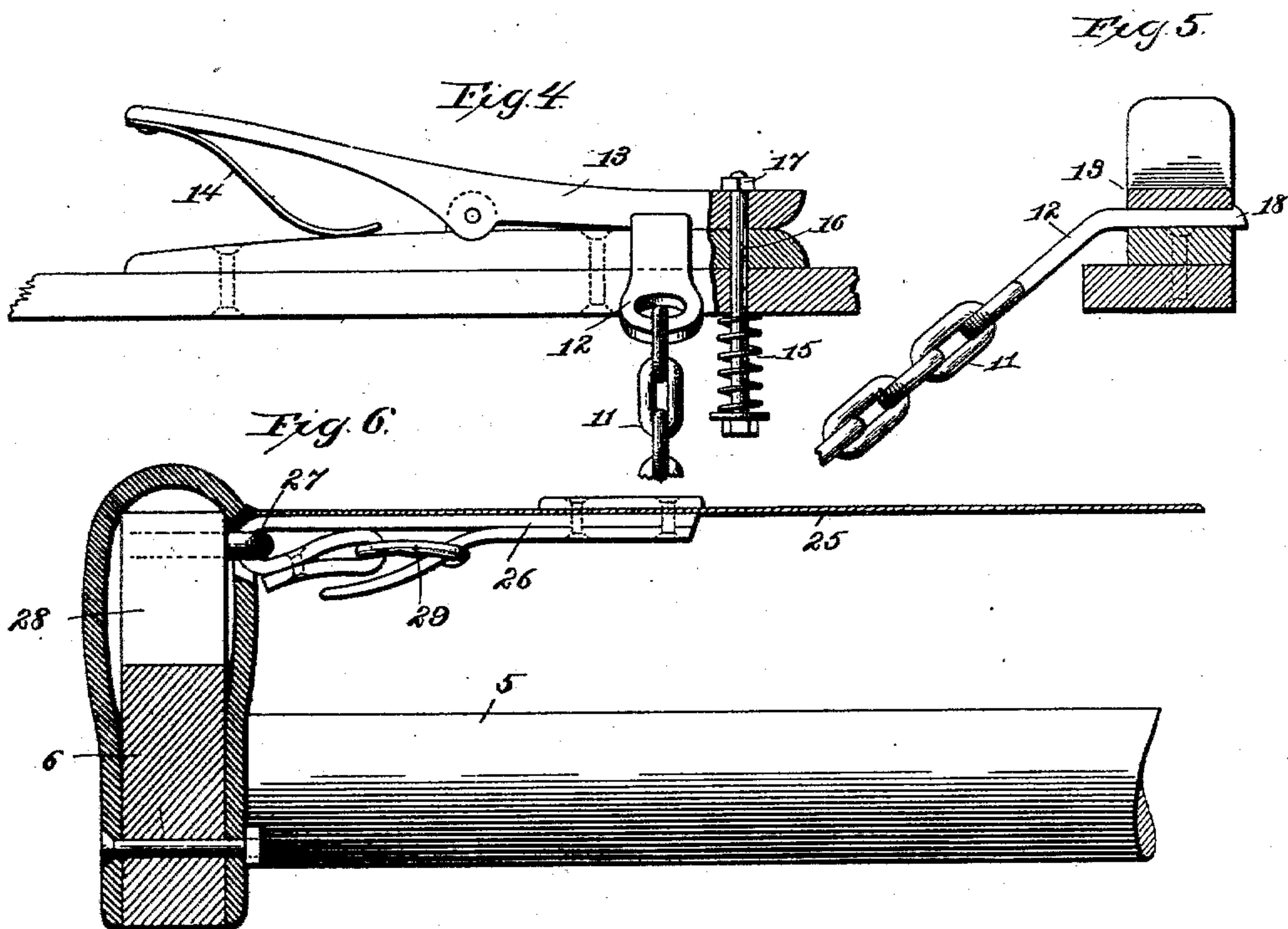
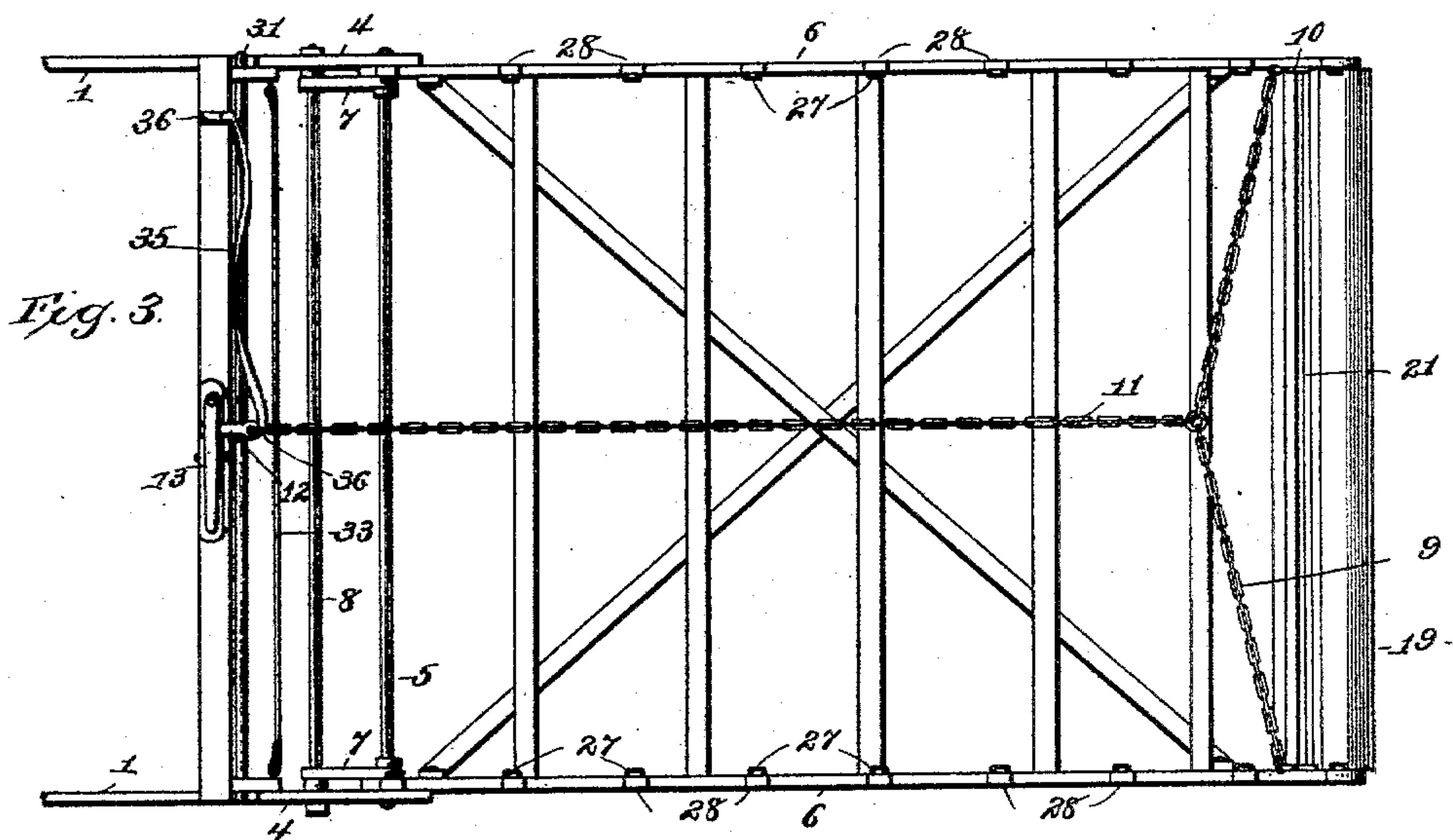
(No Model.)

2 Sheets—Sheet 2.

P. J. WATERS.
CAR FENDER.

No. 571,714.

Patented Nov. 17, 1896.



Witnesses
E. C. Wideman
S. J. Williams

Inventor
Patrick J. Waters
By Geo. H. Holgate
Attorney

UNITED STATES PATENT OFFICE.

PATRICK J. WATERS, OF BRISTOL, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 571,714, dated November 17, 1896.

Application filed June 2, 1896. Serial No. 593,968. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. WATERS, a citizen of the United States, residing at Bristol, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to a new and useful improvement in car-fenders; and it has for its object to provide a device of this description which, when properly attached to a car, will pick up a person who may be run down by said car and safely carry him until the car can be stopped.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, its construction and operation will now be described, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of a portion of a car having this improvement applied thereto; Fig. 2, a central vertical section of this improvement; Fig. 3, a plan view of the same with the springs omitted; Fig. 4, an enlarged view of the clamp for holding the fender in its elevated position; Fig. 5, a cross-section of said clamp, and Fig. 6 an enlarged view of one of the buckles for holding the covering of the fender in position.

In carrying out this invention brackets 1 are provided, which are of such shape as to be bolted at 2 to the truck-frame and extend forward under the platform of the car, after which they project upward at right angles, as indicated at 3. These brackets are of sufficient strength to support the fender and a person who may be thrust thereon. Extensions 4 of these brackets are forked at their outer ends, thereby adapted to receive the cross-rod 5 of the fender-frame 6, said frame being preferably rectangular in shape and of such a length as to project a considerable distance in front of the car.

In order that the cross-rods 5 may not be withdrawn from engagement with the forked ends of the extensions 4, latches 7 are hinged upon said cross-rod, and their noses are adapted to engage with the cross-rod 8, which latter connects the extensions 4. This arrange-

ment permits of the ready attachment or detachment of the fender-frame to or from the brackets, thereby facilitating its transference from one end of the car to the other. The outer end of the fender-frame is supported by the chain 9, the latter having its two ends connected to clips 10, and a cord or chain 11 is attached to the center of the chain 9 and extends backward, where it is provided with a metal strap 12 of such shape as to be readily held by the clamp 13, the latter being composed of a stationary jaw and a pivoted jaw, the last-named jaw being held in contact with the stationary jaw by means of a spring 14 and also a coil-spring 15, placed around the rod 16, which passes freely through an opening in the stationary jaw, but is held in the swinging jaw by the nut 17, as clearly shown in Fig. 4.

The metal strap 12 is provided with a small projection 18, which, when in engagement with the rear surface of the swinging jaw, will permit the withdrawal of said strap, so that to release the outer end of the fender-frame and permit it to drop into contact with the road-bed it is only necessary to depress the heel of the swinging jaw, when the strap will be released and the fender-frame permitted to swing down at its outer end by gravity.

It is preferable that the swinging jaw be enlarged to receive the strap, in order that said strap may not be displaced sidewise. The outer end of the fender-frame is provided with a buffer-roll 19, so arranged as to prevent the injury of said frame when coming in contact with the road-bed and also to facilitate the scooping up of a person whom the car may run down, and just in the rear of this roll is secured a cross-bar 20, having bolted thereto a heavy rubber strip 21, which also assists in the protection of the front end of the fender-frame when the latter has been depressed into contact with the road-bed.

In practice it is not intended that the front end of the fender-frame under ordinary circumstances shall come in contact with the road-bed, and to prevent this spring-shoes 22 are bolted to the side rails of the fender-frame and are inclined backward and downward, so that when the outer end of said frame is depressed these shoes will come in contact with and rest upon the threaded flanges of the rails, and when this takes place it will be seen

that the front end of the frame will be held out of contact with the road-bed, yet in close proximity thereto.

Another advantage of the fender-frame being thus supported is that when it comes in contact with a person the force of the impact will be broken by the depression of the frame against the action of the spring-shoes, thereby lessening the injury which the person would otherwise receive.

A series of cross-bars 23 connect the side rails of the fender-frame, and upon these bars are placed coil-springs 24, which are adapted to support the covering 25 of said frame, so as to prevent it from sagging. The springs are secured to the bars in any well-known manner, it being found sufficient to have one end of the spring resting in an aperture of the cross-bar, with the first coil lying on the surface of said bar. This covering is secured in place upon the frame by the straps 26, which are riveted or otherwise secured thereto and adapted to be passed through the eyes 27, projecting from lugs 28, supported by the side rails. The straps 26 carry buckles 29, by means of which the covering may be drawn taut and secured, and yet when it is desired to remove this covering it may be quickly done by unbuckling the straps, as will be readily understood.

The uprights 3 of the brackets have hooks 30 projecting therefrom, with which the outer ends of the cross-rods 31 are adapted to engage, and these cross-rods connect the side bars to the upright frame 32. This frame carries a number of eyes, which correspond to the eyes 27 of the fender-frame, and the covering 33 is secured over the frame by a series of straps and buckles similar in all respects to the straps and buckles 26 and 29, respectively.

From this description it is obvious that should a car having this improvement applied thereto run down a person when traveling rapidly along the track it is only necessary for the motorman to depress the heel end of the clamp 13, when the metal strap will be released and the fender-frame dropped into position, as shown in dotted lines in Fig. 1, and pick up such person, and unless the car is stopped before coming in contact with the person said person will be scooped up and thrust upon the covering 25, which, on account of its being taut and also supported by the springs 24, will yield sufficiently to prevent injury to said person. Should the momentum of the car be sufficient to cause the person scooped up to come in contact with the upright frame, the cover 33, in conjunction with the springs 34, which are arranged in the rear thereof, will break the force of this contact.

When the chain 11 is released, as before described, it will be swung to one side by the connection 35, which is attached at 36 to the upper rail of the vertical portion of the brackets, the opposite end being connected at 36 to

the chain 11. It is obvious that this fender might be attached directly to the body of the car or to the platform thereof, but in practice it is preferred to secure it, as described, to the truck-frame in order that the oscillations of the car may not affect the position of the outer end of the fender-frame relative to the road-bed.

Other slight modifications might be made in this improvement without departing from the spirit thereof, and it is therefore not desired to limit said improvement to the exact design shown.

Having thus fully described this invention, what is claimed as new and useful is—

1. In a device of the character described, a clamp consisting of a stationary member, a spring-pressed lever pivoted thereto, a bolt secured to the lever and projecting through a hole in the stationary member and a spring located between the end of the bolt and the stationary member in combination with a metal strap secured on the end of a chain having a projection on its end adapted to be engaged by the clamp, as and for the purpose described.

2. In combination with a car, a pair of brackets secured to the truck-frame thereof, a fender pivoted to said brackets, latches for holding said fender in position, springs carried by the cross-bars of said fender, a cover stretched over said fender, straps for stretching said cover, eyes through which said straps pass, buckles carried by said straps for securing them within the eyes, a chain adapted to support the outer end of the fender, a clamp for holding the upper end of said chain against the weight of said fender, spring-shoes carried by the outer end of the fender adapted to slide upon the rails of the track, and a rubber strip secured to the outer end of the fender, substantially as shown and described.

3. The herein-described combination of the brackets 3, a fender pivoted to forked extensions, latches for securing said fender in position, springs carried by the cross-bars of said fender, a covering for said springs, straps carrying buckles for securing said cover in place, eyes through which said straps are adapted to pass, spring-shoes carried by the outer end of the fender adapted to slide upon the rails of the track, a chain for supporting the outer end of the fender, a metal strap carried by said chain, a clamp for holding said strap, means for releasing said strap when the fender is to be depressed, a vertical frame 32, hooks 30, for securing said frame in position, and a covering 33, for said frame, substantially as shown and described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

PATRICK J. WATERS.

Witnesses:

S. S. WILLIAMSON,
MARK BUFORD.