

No. 815,105.

PATENTED MAR. 13, 1906.

B. LEV.  
LIFE GUARD FENDER FOR CARS.  
APPLICATION FILED JULY 15, 1904.

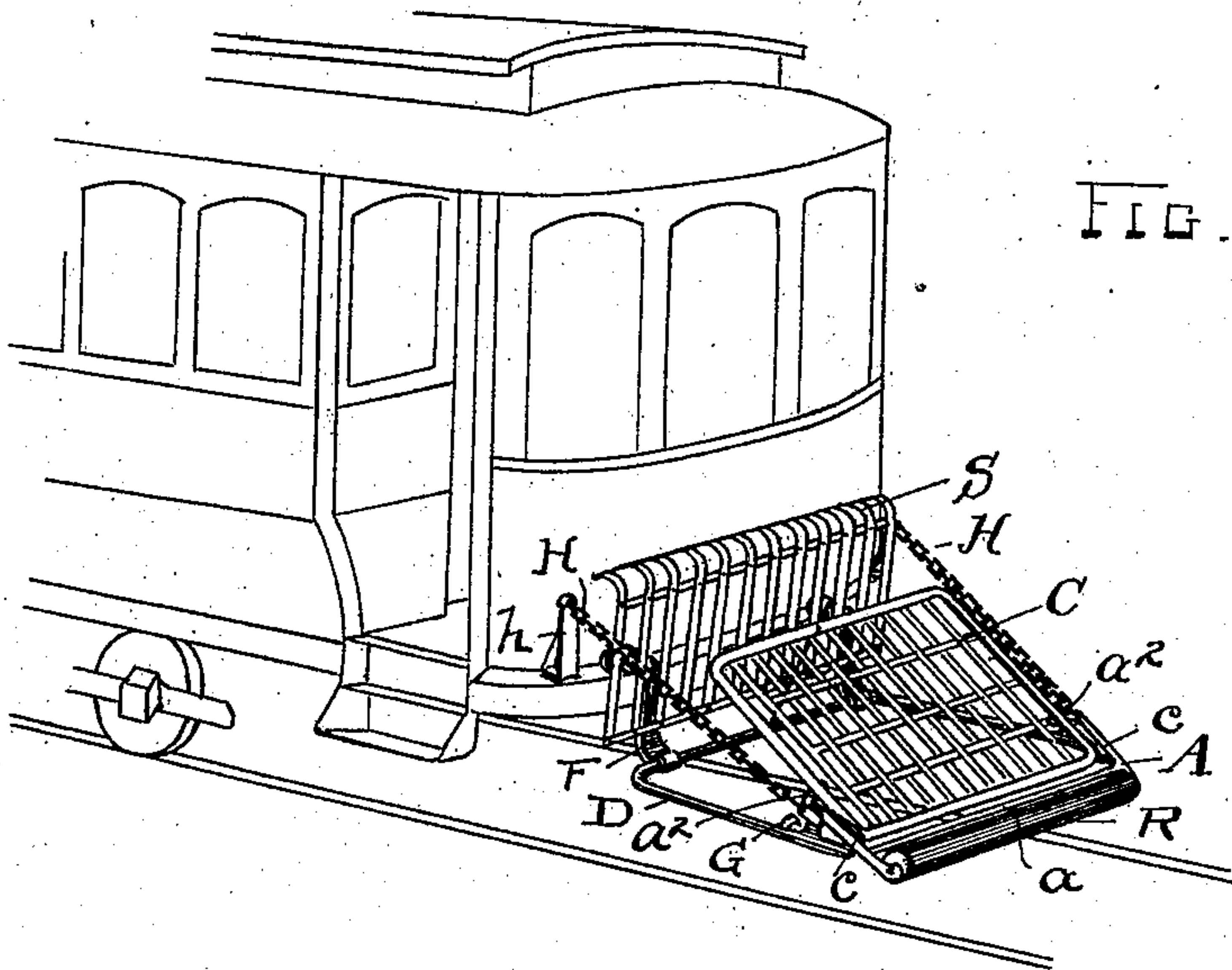


FIG. 1.

FIG. 2.

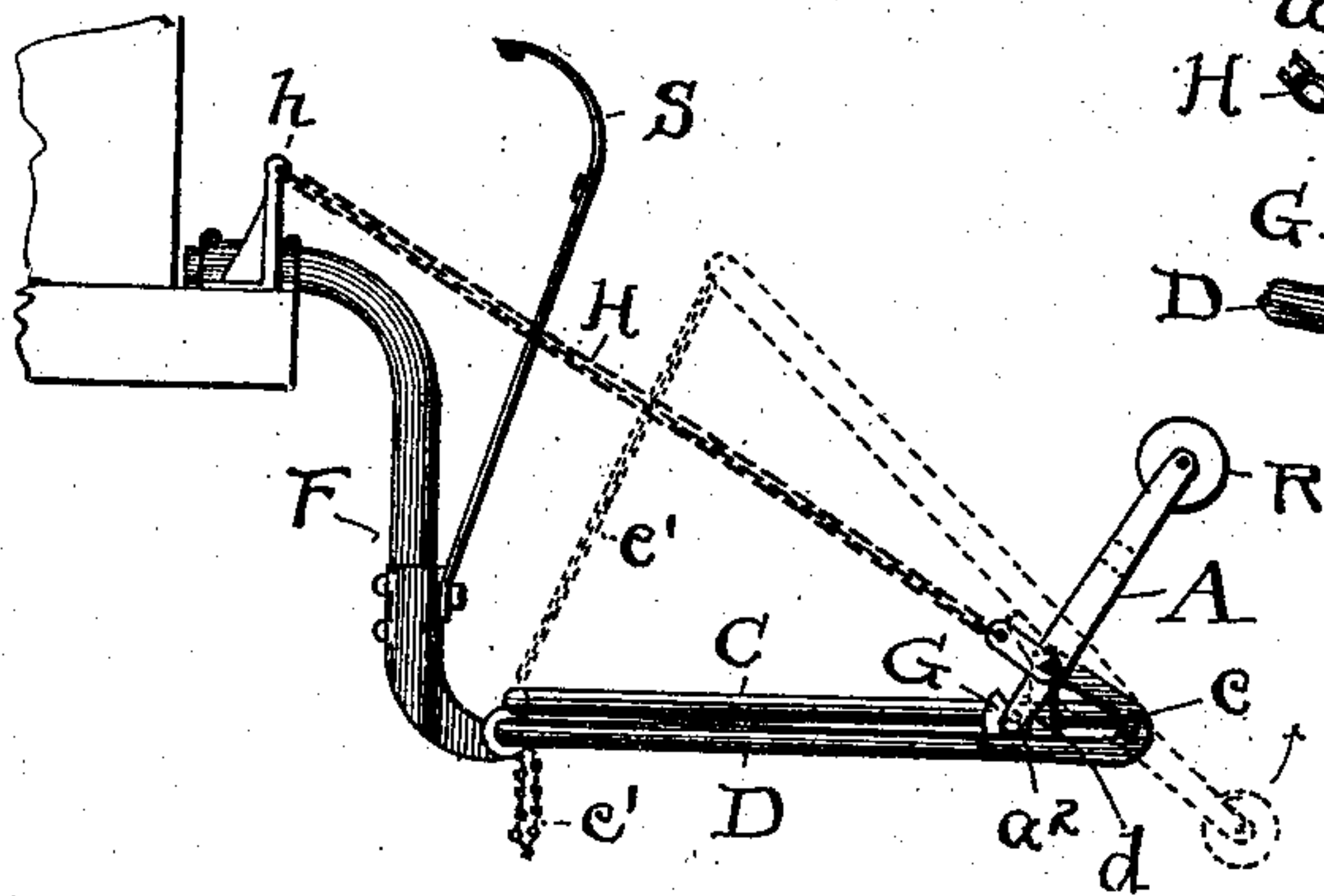
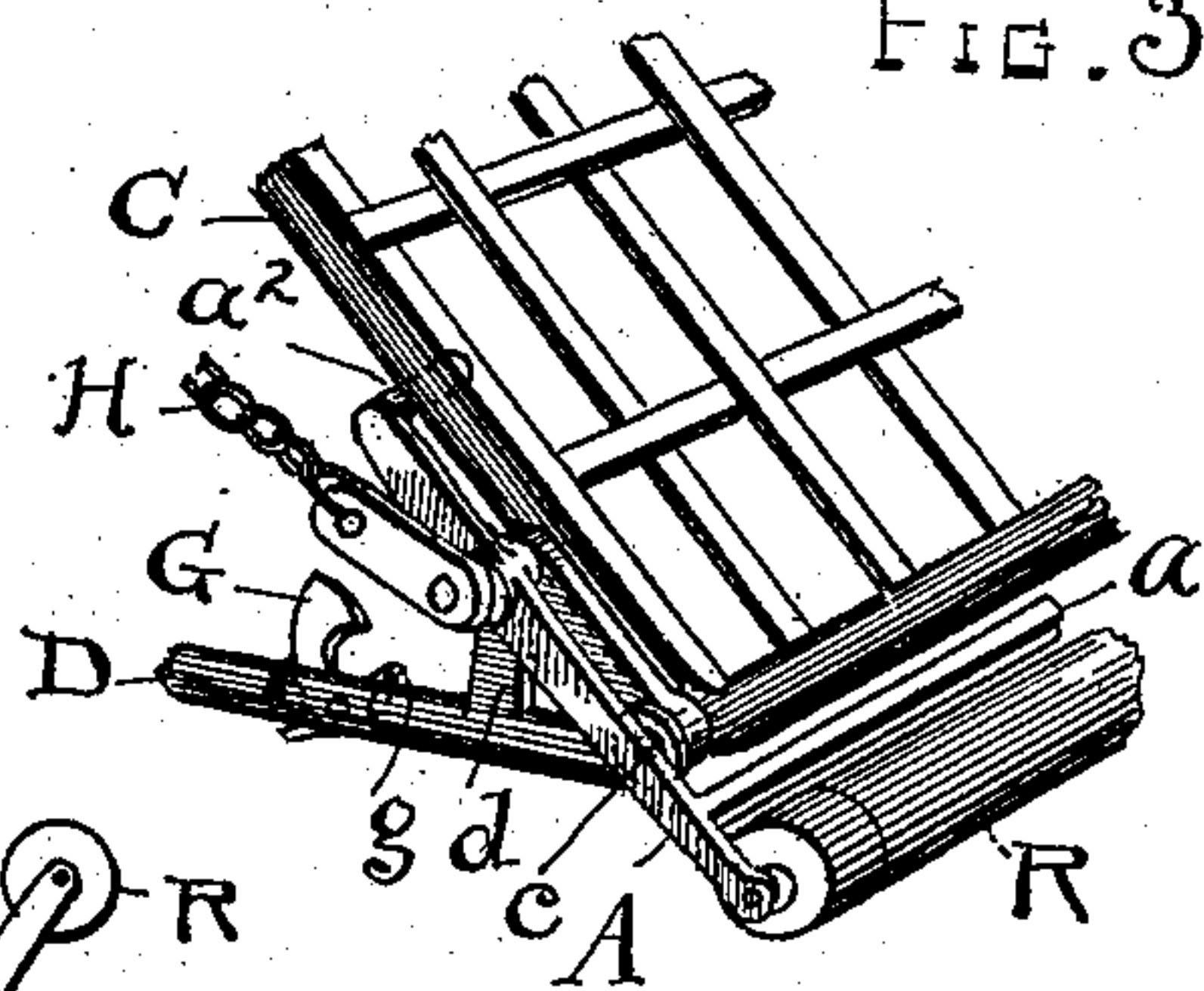


FIG. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## LIFE-GUARD FENDER FOR CARS.

No. 815,105.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed July 15, 1904. Serial No. 216,727.

*To all whom it may concern:*

Be it known that I, BENJAMIN LEV, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Life-Guard Fenders for Cars; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a life-guard fender for cars; and the invention consists in the construction and combination of parts substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a car and my improved fender mechanism in operative position thereon. Fig. 2 is a side elevation of the said fender mechanism as it appears when the carrier has been reversely tilted, as when a person is picked up and a basket effect is obtained with the life-guard; and Fig. 3 is a perspective view of a portion of the fender mechanism, enlarged, and as it appears in normal or working position shown in Fig. 1.

The style of fender to which this invention relates comprises a tilting carrier for picking up a person or other object that comes in the path of the car and of confining the person therein, so that he cannot be cast off and crushed. To this end the invention consists in a carrier C, having pivots *c* at its front edge on a supporting-frame D and a cushioning or striking roller R, supported in a frame of its own, comprising side arms or pieces A and cross connection *a*, and the whole pivoted on posts or uprights *d* on supporting-frame D behind pivots *c*. By this mechanism if a car be running at any considerable speed the person is not only tripped up by roller R, but thrown back with more or less severity against the buffer-springs S, according to the speed the car is coming. The reaction from these springs is liable to be such as to throw the person forward off the carrier with more or less force where he is in danger of being run over and crushed by the car and especially since this style of fender is not calculated to pick up prostrate forms or objects, but rather objects that are erect and are struck below the center of gravity. In the case of a per-

son the roller R strikes above the ankles somewhat, and with the trip delivered at this point and the car under speed the person is thrown over the carrier back against spring S. The real danger after this has occurred is in the rebound from the spring, and to overcome this danger and to render one perfectly safe within the fender I provide safety mechanism consisting of a so-called "life-guard," comprising the roller R and its supports, which are automatically thrown into a more or less inclined vertical position relatively as seen in Fig. 2. This position of the said roller and its supporting-arms A and the cross bar or rod *a*, connecting the said arms behind the roller and constituting the life-guard frame, is mechanically and automatically produced by the tilting of the carrier C to its horizontal or reversed position. Thus the said carrier being pivoted at *c* and the arms A upon posts *d* back of the pivots *c* some distance and high enough to tilt the roller-frame, substantially as seen in Fig. 2, when the carrier is tilted, it follows necessarily that a back-strap or barrier is set up against reaction from spring S, which must confine the body.

The arms of the life-guard frame (designated by A) are pivoted on the posts *d* on frame D outside of frame C and some distance back of pivots *c*, and said arms are free to turn on their pivots from dotted lines, Fig. 2, to full lines in said figure, and right-angled ends *a*<sup>2</sup> at the top of said arms engage under frame C and limit tilting of the roller R when in working or normal position. When said arms are tilted to full lines, Fig. 2, the hooks or catches G come into play and hold the frame A up in guarding position. This catch has a finger or projection *g* beneath or forward of its pivot, which the finger *a*<sup>2</sup> of frame A strikes in its descent and throws the hook over said finger or extension *a*<sup>2</sup>. Then the said roller or roller-frame is held in its tilted and confining position, as in Fig. 2, and the safety effect is obtained. Obviously the roller or life-guard frame is thrown into this position by the depression of carrier C at the rear, which carries said frame into the safety position by reason of the relatively high posts *d*. A frame other than the roller-frame might be used at this point and form a guard or shield at the front



of the carrier; but the present construction is preferred, and the roller makes a good counterbalance for the arms A to carry the said frame in working position, as in Figs. 1 and

3. The carrier C is in normal position in Figs. 1 and 3 and in reverse or down position in Fig. 2, as when a person has been picked up.

Chains H connect at one end at or with pivot-posts *d* and at the other with standards or posts *h* on the car-body or with said body itself and serve as front supports of the entire fender mechanism from the car. A stay-chain *e'* limits the tilting of carrier C.

The frame or part D is referred to herein as the "supporting-frame," and so it is; but the term "frame" is regarded as generic for side supports on which the carrier is pivoted, and such supports need not necessarily be part of a frame as such to serve my purpose. It will also be observed that in this fender the carrier is pivoted on the supports at its front corners and not back therefrom, as has been my practice heretofore.

What I claim is—

1. In car-fenders, a tilting carrier and supports therefor at its sides, a life-guard across the front of said carrier, said parts constructed to throw said guard into a raised position when the carrier has been reversely tilted, substantially as described.

2. In car-fenders, a fender mechanism comprising a pivoted carrier, a life-guard pivoted independently of said carrier and provided with side projections in actuating relation with said carrier, whereby when the carrier is tilted the said guard is tilted also into guarding position, substantially as described.

3. In car-fenders a supporting-frame having posts near its front ends, a carrier pivoted in the said frame in advance of said posts and

a life-guard pivoted on said posts and engaging said carrier above said pivots, substantially as described.

4. In car-fenders, a pivoted supporting-frame and a carrier pivoted thereon, a cushioning member and a frame carrying the same pivoted on said supporting-frame, and having free engagement beneath the carrier back of its pivots, and a catch on said supporting-frame to engage and hold said cushioning member in raised position, substantially as described.

5. In car-fenders, a supporting-frame pivoted at its rear and flexible stays supporting its front, a tilting carrier pivoted in the front of said frame, a life-guard for said carrier pivoted on said supporting-frame at the rear of the pivots for the carrier and on a plane above the same, and the said life-guard operatively connected with said carrier rear of both said pivots, whereby when the carrier is thrown down behind the life-guard is thrown up in front, substantially as described.

6. In car-fenders, the combination of a supporting-frame, a carrier pivoted thereon and a life-guard pivoted on said frame and operatively engaged with said carrier, substantially as described.

7. In car-fenders, a carrier and side supports on which the carrier is pivoted at its front corners, a life-guard frame pivoted on said side supports and having extensions back of its pivots engaged beneath said carrier, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

BENJAMIN LEV.

Witnesses:

R. B. MOSER,  
C. A. SELL.