(No Model.) 2 Sheets—Sheet 1.

G. P. LAUBENSTEIN.

CAR FENDER.

No. 582,933. Patented May 18, 1897.

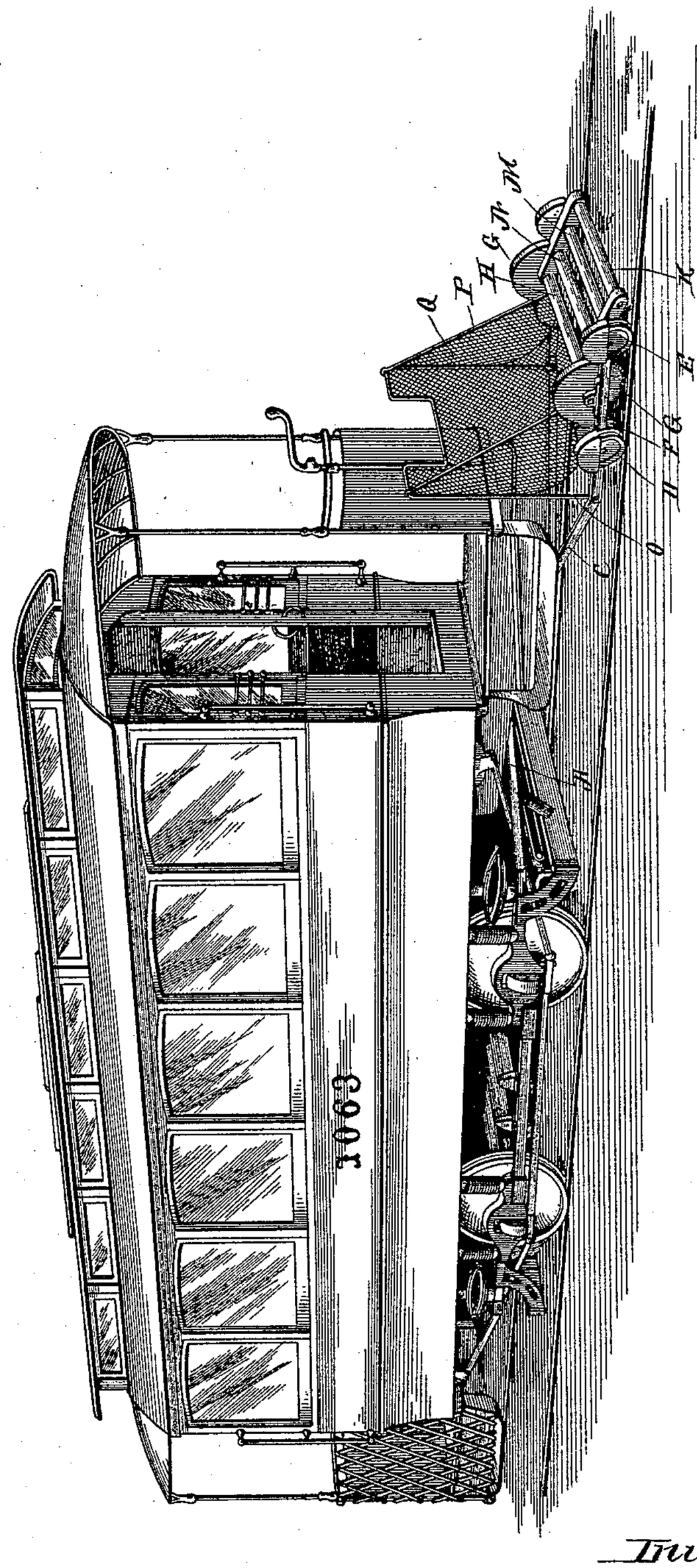

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

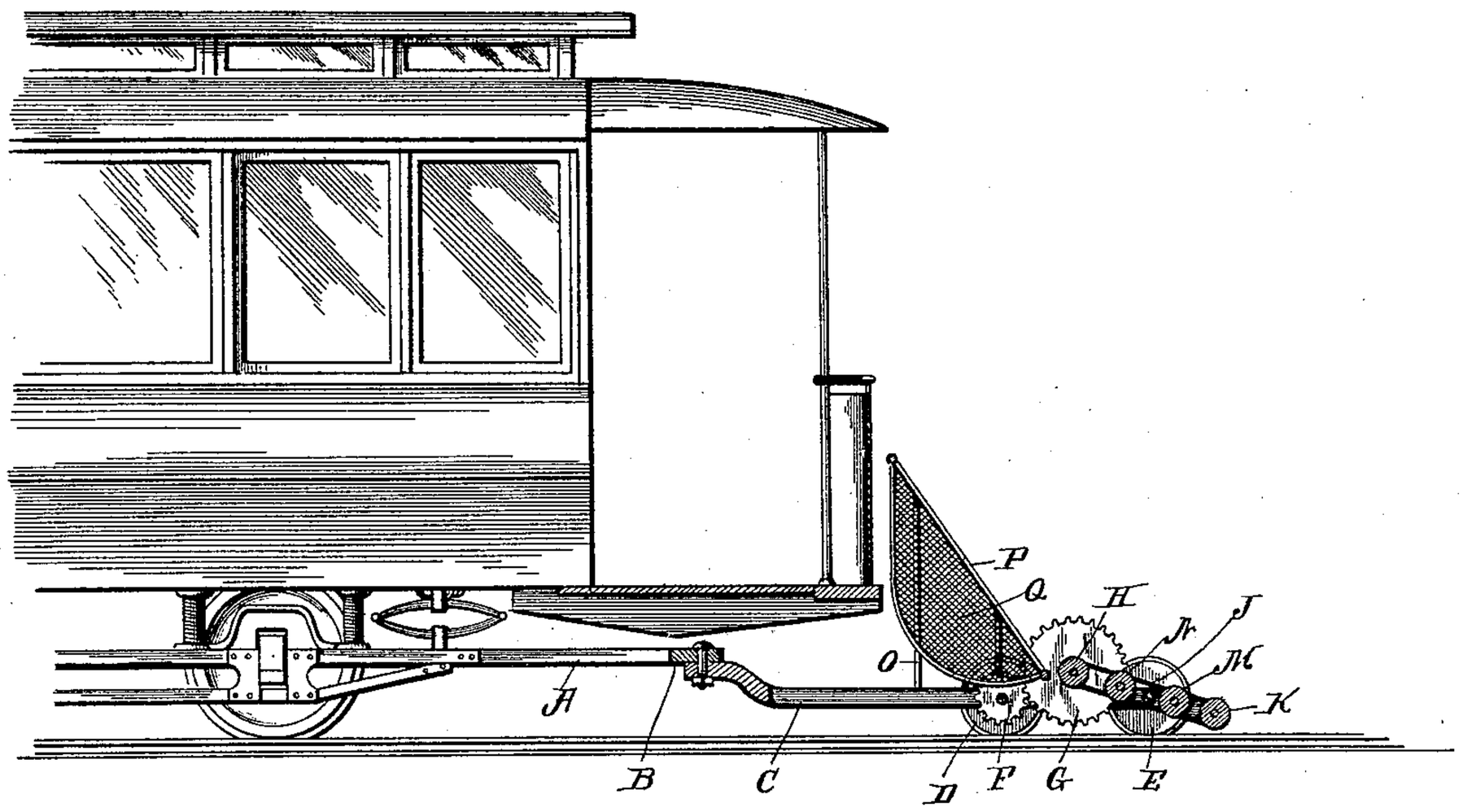
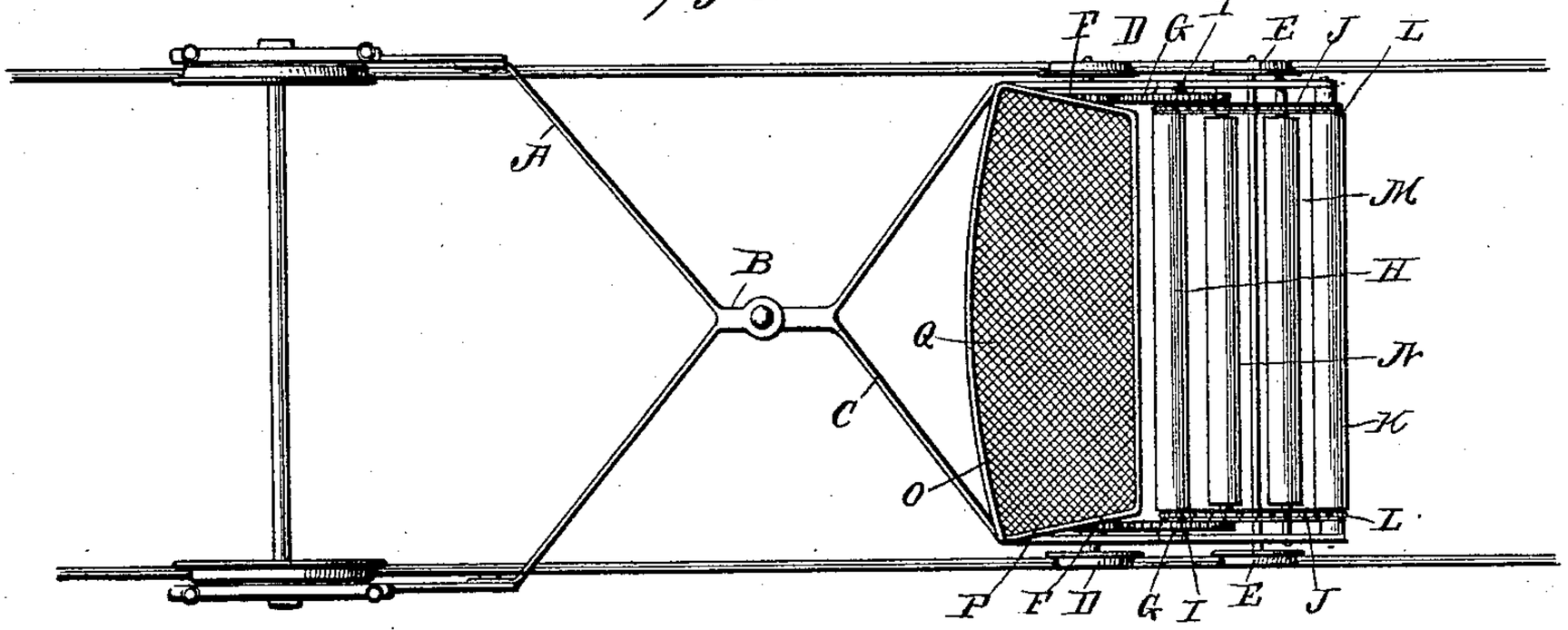


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE P. LAUBENSTEIN, OF PHILADELPHIA, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 582,933, dated May 18, 1897.

Application filed October 27, 1896. Serial No. 610,222. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. LAUBENSTEIN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Car-Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in car-fenders, and has for its object to provide an effective device of this description which when attached to a car will travel in advance thereof upon the track in such manner as to preclude the possibility of the car passing over a person, since the fender will scoop up said person and safely retain him upon the netting until the car may be stopped and such person removed.

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 in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective of a car having my improvement applied to the front end thereof; Fig. 2, a side elevation of one end of the car, the platform being in section and a portion of the framework of the fender being sectioned away, so as to illustrate the operating mechanism thereof; and Fig. 3, a plan view of the fender and its connection with the truck of the car.

In carrying out my invention as here embodied I provide an extension-frame A, which is secured to the truck of the car in such manner as to project rigidly therefrom, and this frame terminates in an eye B, to which is swiveled the fender-frame C. The fender-frame extends forward in front of the platform and is mounted upon the truck-wheels D and E, the former of which has secured upon its axle a gear-wheel F. This gear-wheel meshes with the gear-wheel G, which is also journaled in the truck-frame and carries upon its spindle a roll H and also sprocket-wheels I, over which run the sprocket-chains J.

In the front end of the truck-frame, which stands at an incline to the body thereof, is journaled a buffer-roll K, having thereon the sprocket-wheels L, over which the chains J also run and by means of which rotation is imparted to this roll in the direction of the arrow marked thereon. Between the rolls H and K are journaled the rolls M and N, but these rolls have no connection with the chains and therefore do not revolve except when an object comes in contact with their upper surfaces.

A vertical frame O projects upward from the truck-frame and is provided with the brace-rods P, and stretched between these brace-rods and the frame is a suitable netting Q, so arranged as to form a receptacle into which a person will be thrust when picked up by the fender.

The operation of my improvement as thus described will be as follows: A car passing along the track having my improvement attached thereto will cause the truck-wheels D and E to revolve, and the frame, on account of its connection with the gear-wheel G, will give to the rolls H and K a revolving movement, so that should the roll K come in contact with an obstruction, such as a person, said obstruction will be given a tendency to move upward and rearward by the rotations of this roll, and this upward and rearward movement of the obstruction will be facilitated by the further revolving of the rolls M and N, which act as a frictionless surface over which the obstruction may pass until being thrust within the net, where it will safely remain until the car may be stopped.

One of the advantages of my improvement is that being attached to the truck of a car the oscillations of the car-body are not transmitted to the fender, and since the fender travels upon the rails of the track the buffer-roll will at all times be maintained at a given height from the road-bed, thus precluding the possibility of said roll passing over a person, even though said person be lying prostrate upon the ground.

The fact that the fender is swiveled to the frame A permits it to pass around a curve in

advance of the car, and thus does not obstruct the street through which the car may be passing.

In practice an extension-frame A may be secured to either end of the truck of the car, so that when the car is run in an opposite direction it is only necessary to remove the swivel-bolt and convey the fender to the opposite end thereof and couple it to the extension-frame at that end, thus utilizing a single fender for both ends of the car when said car runs in two directions.

I prefer to have the sprocket-chains and gear-wheels incased in a suitable housing, as shown in Fig. 1, and the truck-wheels D and E may also be inclosed in a casing, thereby protecting them from accident, as will be readily understood.

Other slight modifications might be made in the construction here shown and described without departing from the spirit of my invention, and I therefore do not wish to limit myself to this exact design.

It is obvious that the rollers may be revolved in a reverse direction, or that the fender may be placed upon the opposite end of the car when the car is traveling in the opposite direction, and also that the front roller may be geared directly with the truck-wheels E, if found necessary.

Having thus fully described my invention, what I claim as new and useful is—

1. In combination, a frame secured to the truck of a car, projecting rigidly therefrom and terminating in an eye, a fender-frame pivoted to the first-named frame, truck-wheels upon which the fender-frame is mounted, a gear carried by the axle of one of the wheels, a gear meshing with the first-named gear, a series of rolls journaled in the fender-frame, means for causing the rolls to revolve from the last-named gear-wheel and a scoop-shaped netting mounted in the rear of said rolls, substantially as described.

2. The herein-described combination of an extension-frame A projecting from the truck of the car, a frame C pivoted thereto, wheels D and E upon which said frame is mounted, a gear-wheel F carried by the axle of the wheels D, a gear-wheel G with which the first-named gear meshes, a roll H journaled in the frame and upon which is secured the wheel G, sprocket-wheels I also carried by the roll H, a buffer-roll K journaled in the front end of the frame, sprocket-wheels L carried by the last-named roll, sprocket-chains J connecting the sprockets I and L, rolls M and N journaled between the rolls H and K, and a receptacle formed by an upright frame and netting for retaining a person picked up by the fender, substantially as shown and described.

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

GEORGE P. LAUBENSTEIN.

Witnesses:
S. S. WILLIAMSON,
MARK BUFORD.