

C. H. MERRITT.
CAR FENDER.

APPLICATION FILED JUNE 7, 1911.

1,011,222.

Patented Dec. 12, 1911.

2 SHEETS—SHEET 1.

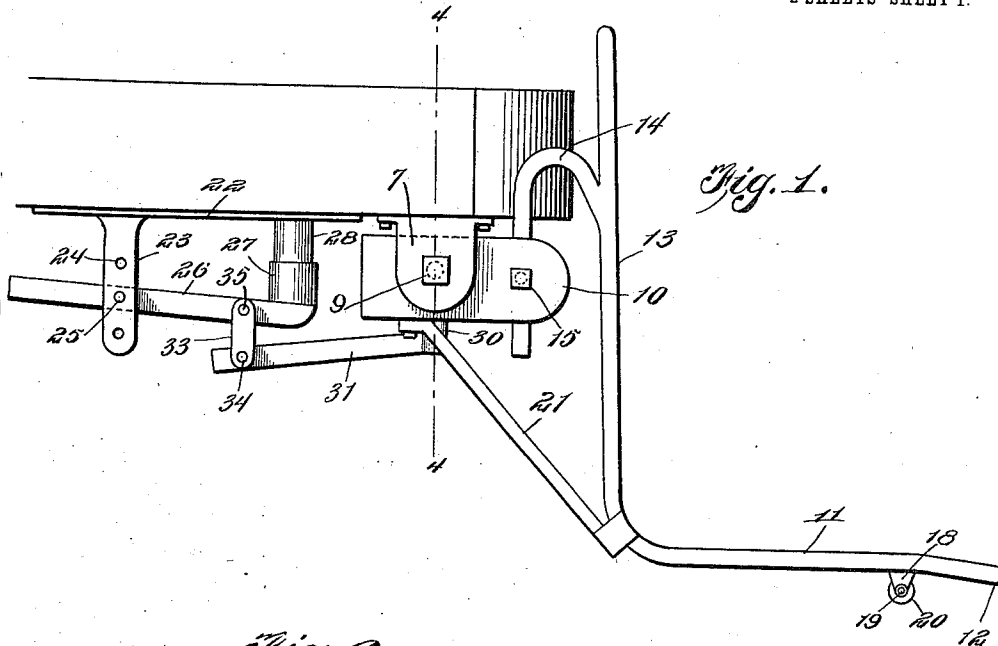
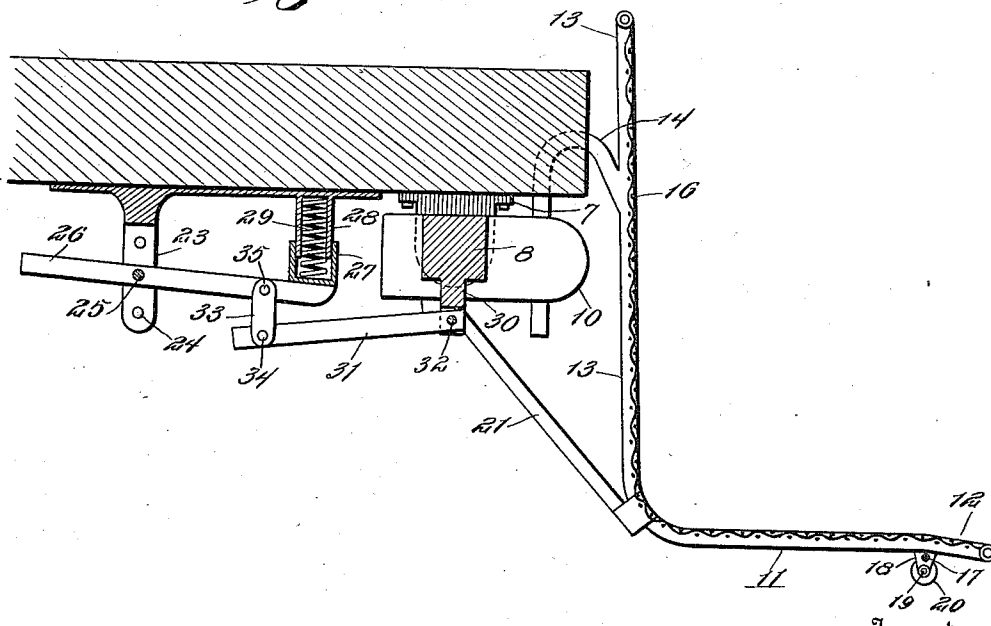


Fig. 3.



Witnesses

Louis R. Hennrichs
H. O. [Signature]

Charles H. Merritt

By Victor J. Evans
Attorney

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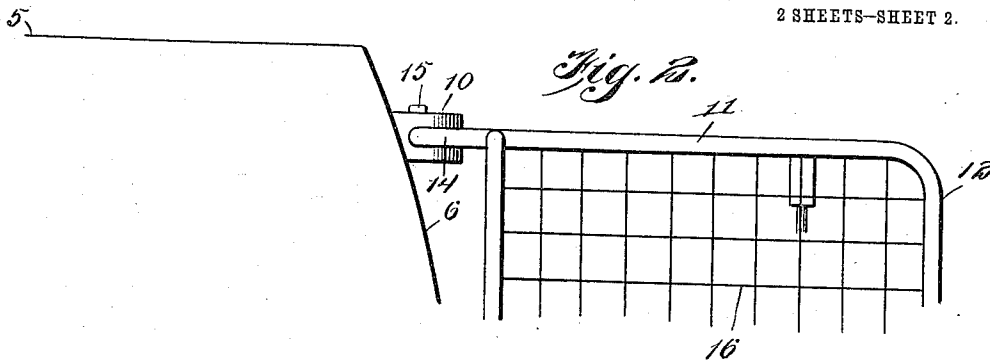
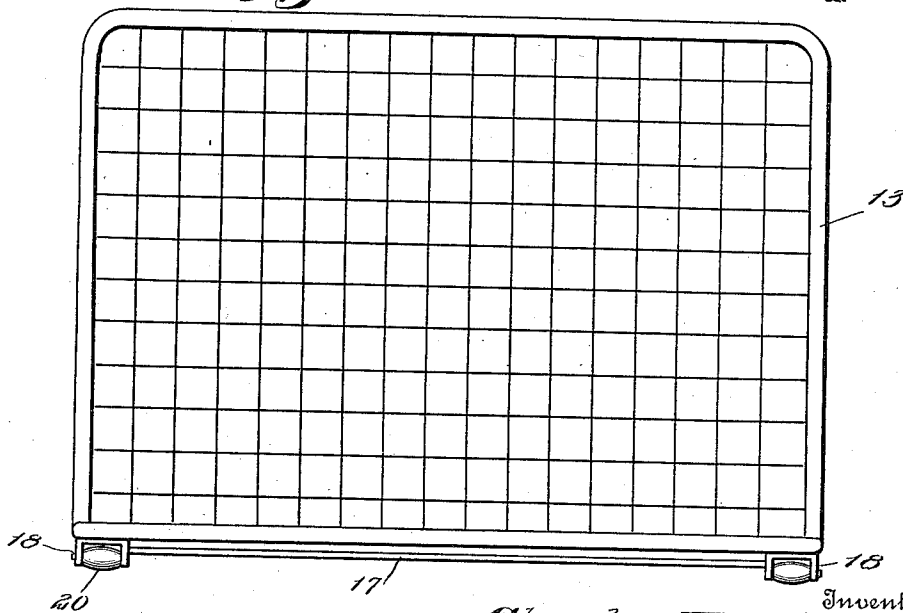
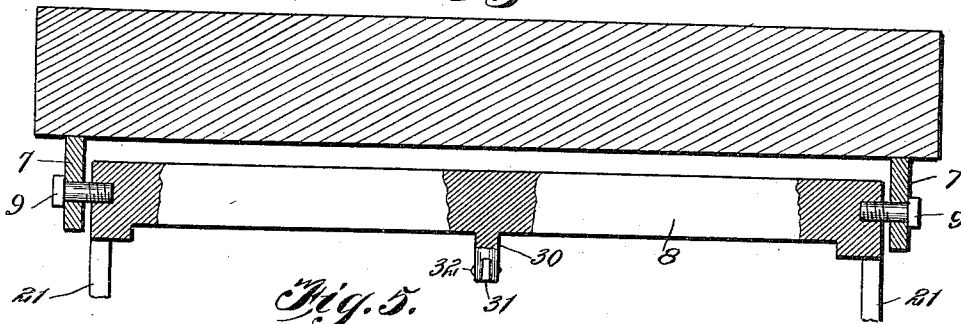


Fig. 4.



Witnesses

Louis S. Heinrichs
H. O. Paulsen

Charles H. Merritt
Inventor

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE

CHARLES H. MERRITT, OF ST. PAUL, MINNESOTA.

CAR-FENDER.

1,011,222.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed June 7, 1911. Serial No. 631,776.

To all whom it may concern:

Be it known that I, CHARLES H. MERRITT, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Car-Fenders, of which the following is a specification.

The invention relates to car fenders, and more especially to the class of street railway car trip fenders.

The primary object of the invention is the provision of a fender in which a pedestrian, when in the path of movement of the car, may be picked up by the said fender, thereby avoiding injury to the person, or the possibility of being run over by such car.

Another object of the invention is the provision of a fender in which the frame thereof is provided with rollers adapted to contact with and travel upon the railway rails when the weight of an object strikes the frame of the fender, thereby enabling the said object to be caught in the fender, and thus prevent the possibility of the car wheels passing over such object, the fender being highly efficient for preventing the loss of life or injury to pedestrians, when in danger of being struck by the car while in motion.

A further object of the invention is the provision of a fender which is simple in construction, capable of being readily and easily mounted upon cars of the ordinary well-known construction, and that is thoroughly reliable and efficient in operation, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings: Figure 1 is a fragmentary side elevation of a car with the fender mounted thereon and in normal position. Fig. 2 is a fragmentary top plan view of a portion of the car with the fender in dropped position or lowered for catching a pedestrian or other object positioned in front of the car. Fig. 3 is a central longitudinal sectional view. Fig. 4 is a sectional view on the line 4-4 of Fig. 1. Fig. 5 is a front elevation of the fender.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, 5 designates generally the front portion of a car, and 6 its forward platform, to the under face of which, near opposite longitudinal sides thereof, are secured depending bearings 7, between which is arranged a rocking beam 8, the outer ends thereof being engaged by adjusting pins or bolt members 9 pivoted in the bearings 7, the beam 8 being formed at opposite ends with forwardly projecting extensions 10, to which is connected the fender, as will be presently described.

The fender comprises a frame 11, the side bars of which are bent to provide a forwardly inclined front section 12, and an upwardly extending vertical section 13, from which projects rearwardly substantially hook-like arms 14, the latter being adjustably engaged in suitable vertical openings formed in the extensions 10 of the rocking beam 8, and these arms are held fast in adjusted position by means of binding screws 15, threaded in the extensions 10 and engaged with the said arms. Thus, it will be seen that the fender frame may be adjusted vertically, as may be desired.

Arranged in and connected with the frame 11 is a net 16 composed of wire or other suitable material, the net being connected to the frame in any suitable manner, so as to support an object when caught in the frame, during the travel of the car over the tracks.

Secured in the forwardly inclined section 12 of the frame 11, near the front end thereof, is a transverse rod 17, the same being formed near opposite ends with spaced depending bearings 18, in which are journaled stud axles 19 supporting rollers or casters 20, which are adapted to aline with the rails of the track on which the car travels, so that upon the lowering of the forwardly inclined section 12 of the fender frame, when burdened with weight, the rollers will travel upon the track rails, thereby sustaining the load upon the fender frame, while the car is in motion.

Secured to the end extensions 10 and to the frame 11, near the curvature therein, are heel braces or bars 21 which serve to materially strengthen the frame when subjected to a heavy load.

Mounted upon the under face of the platform 6, in rear of the rocking beam 8, and centrally of the said platform, is a base plate 22 formed with a depending fork 23,

the same being provided with spaced transverse alining openings 24 for adjustably receiving a pivot pin 25, the latter being passed through a rocking lever 26 formed, at its forward end, with a vertically rising tubiform shell 27, the latter being adapted to telescope upon a depending tubular shell 28 formed on the base plate 22, and in these shells 27 and 28 is confined a coiled expansion spring 29 which holds the rocking lever 26 under tension.

Secured centrally in the rocking beam 8 is a depending lug 30, in which is connected a rod connection 31 by means of a pivot 32, the rod connection 31 being also connected to a link 33 by means of a pivot 34, the link 33 being connected to the rocking lever 26 by means of a pivot 35. Thus, it will be seen that when the fender is burdened with a load, the said load will overcome the resistance of the spring 29, thereby permitting the forwardly inclined section 12 of the fender frame 11 to lower, whereby the rollers 20 will travel upon the rails of the track and on the removal of the load from the fender frame, the spring 29 will act upon the frame through the medium of the connections between the rocking lever 26 and the beam 8, thereby causing the fender to assume normal position, raising the forwardly inclined section 12 of the frame 11 slightly elevated above the rails of the track.

From the foregoing, taken in connection with the accompanying drawings, it is thought that the construction and operation of the invention will be readily understood, without requiring a more extended explanation, and therefore the same has been omitted.

What is claimed is:

1. A car fender comprising a rocking beam adapted to be mounted beneath the front platform of a car for movement on a horizontal axis and having forward extensions, a fender frame having a net center, hook-like arms on the frame and adjustably engaged in the extensions, a base plate fixed to a car platform rearwardly of the beam and having a depending fork, a rocking lever adjustably pivoted in the fork and having a tubular shell at its front end, a tubular shell formed on and depending from the base plate on which telescopes the first-named shell, and a spring confined within the shells for tensioning the lever and connections between the rocking lever and beam,

whereby the spring acting on the said rocking lever will hold the said frame normally elevated.

2. A car fender comprising a rocking beam adapted to be mounted beneath the front platform of a car for movement on a horizontal axis and having forward extensions, a fender frame having a net center, hook-like arms on the frame and adjustably engaged in the extensions, a base plate fixed to a car platform rearwardly of the beam and having a depending fork, a rocking lever adjustably pivoted in the fork and having a tubular shell at its front end, a tubular shell formed on and depending from the base plate on which telescopes the first-named shell, a spring confined within the shells for tensioning the lever and connections between the rocking lever and beam, whereby the spring acting on the said rocking lever will hold the said frame normally elevated, and rollers carried by the frame and in alinement with the rails of a track for contact therewith on the burdening of the frame with a load.

3. A car fender comprising a rocking beam adapted to be mounted beneath the front platform of a car for movement on a horizontal axis and having forward extensions, a fender frame having a net center, hook-like arms on the frame and adjustably engaged in the extensions, a base plate fixed to a car platform rearwardly of the beam and having a depending fork, a rocking lever adjustably pivoted in the fork and having a tubular shell at its front end, a tubular shell formed on and depending from the base plate on which telescopes the first-named shell, a spring confined within the shells for tensioning the lever and connections between the rocking lever and beam, whereby the spring acting on the said rocking lever will hold the said frame normally elevated, rollers carried by the frame and in alinement with the rails of a track for contact therewith on the burdening of the frame with a load, and means carried by the extensions and engaging the hook-like arms for locking the frame in adjusted position.

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

CHARLES H. MERRITT.

Witnesses:

H. S. FAIRCHILD,
R. F. MARVIN.