A. T. MILLER.
Car-Wheel Fender.

No. 220,406. Patented Oct. 7, 1879.

Fig. 1.

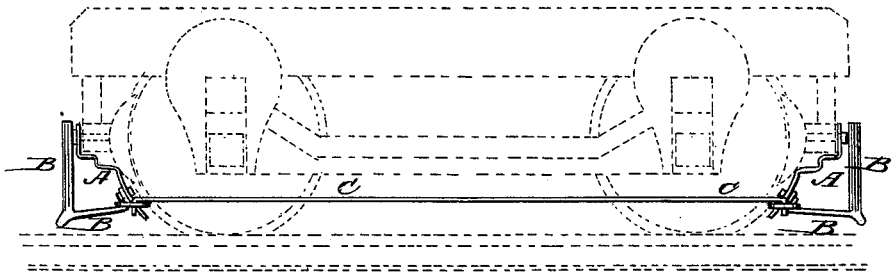


Fig. 2.

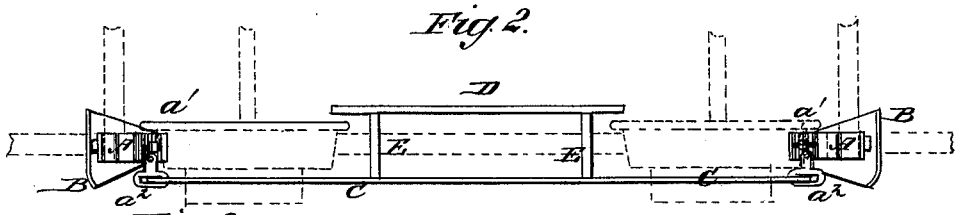


Fig. 3.

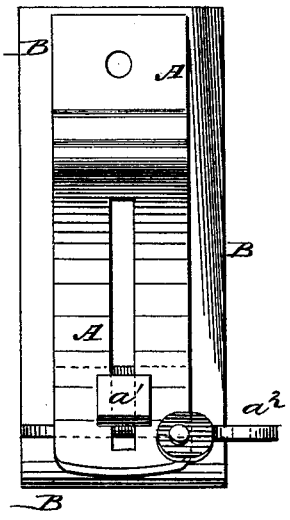
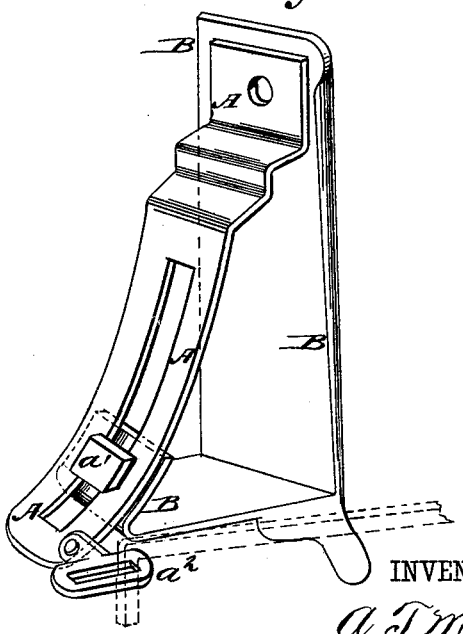


Fig. 4.



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UNITED STATES PATENT OFFICE.

ALLEN T. MILLER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CAR-WHEEL FENDERS.

Specification forming part of Letters Patent No. **220,406**, dated October 7, 1879; application filed June 25, 1879.

To all whom it may concern:

Be it known that I, ALLEN T. MILLER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Guard for Car-Wheels, of which the following is a specification.

Figure 1 is a side view of my improved device, shown as applied to the wheels of a car-truck. Fig. 2 is a top view of the same. Fig. 3 is a detail rear view of one of the guards. Fig. 4 is a detail perspective view of the same.

The object of this invention is to furnish an improved guard for car-wheels, the use of which will render it impossible for any person or any thing to be run over by the wheels, and which shall be so constructed that it will not be liable to be injured or broken should the car jump the track.

The invention consists in a guard for car-wheels formed of the curved and slotted plate and the angular plate secured to each other by a bolt or bolts, and in the combination of the curved and slotted plates, the angular plates, the connecting-bolts, the slotted lugs, the parallel rods, and the cross-rods with each other, as hereinafter fully described.

A represents a plate of steel, the upper end of which is designed to be bolted to the brake-bar of the truck.

The plate A is designed to be so formed as to fit upon the brake-bar, the brake-shoe, and to follow down the tread of the wheel to within about two inches of the rail of the track.

The lower part of the plate A is slotted longitudinally, to receive the bolt or bolts a^1, that secure the steel plate B to the said plate A.

The plate B is made in angular form, and the end of the lower or horizontal arm is bent upward, to fit against the plate A and receive the bolt or bolts a^1, by which it is secured to the said plate A.

The upper arm of the plate B projects upward upon the outer side of the plate A, and rests against the end of the bolt that secures the said plate A to the brake-bar.

The plate B at its angle projects downward to within about an inch of the rail.

The plate A is made of a width about equal to that of the face of the wheel, and is so arranged that its outer edge may project a little beyond the outer side of the wheel.

The outer edge of the upper arm of the plate B projects a little beyond the outer edge of the plate A, and is curved slightly to the rearward or toward the said plate A.

To the lower outer corner of the plate A is attached a slotted lug, a^2, to receive a hook formed upon the end of the rod C, the outer end of which is hooked into a similar lug upon the plate A of the other wheel-guard at the other end of the truck.

D is a rod placed parallel with the middle part of the rod C, and at a distance from it a little greater than the thickness of the wheels. The rod D is a little longer than the distance between the truck-wheels, and is connected with and supported from the rod C by cross-rods E, placed near the adjacent parts of the said wheel, as indicated in Fig. 2.

The edge of the plate A and its lug a^2 should project so much beyond the wheel that the said rod C may be clear of the said wheel.

With this construction, should a person or any object fall upon the track in front of the car-wheels, it will be pushed to one side, and will not be run over.

Should the car jump the track, the plate B will be pushed up so that it will not be broken, and at the same time the hooks of the rod C will be pushed out of the slots of the lugs a^2, so that they will not be broken.

The slots in the lugs a^2 must be so long that the rods C will not interfere with the movements of the brake-bars, as the brakes are applied to and withdrawn from the wheels.

In case the brake-bars are placed between the wheels of the truck the plates A are extended upward along the face of the wheels, and their upper ends are bolted to the cross-beams of the trucks.

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

1. A guard for car-wheels formed of the curved and slotted plate A and the angular

plate B, secured to each other by the bolt or bolts a^1, substantially as herein shown and described.

2. The combination of the curved and slotted plates A, the angular plates B, the connecting-bolts a^1, the slotted lugs a^2, the parallel rods C D, and the cross-rods E with each other, substantially as herein shown and described.

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