

No. 607,118.

Patented July 12, 1898.

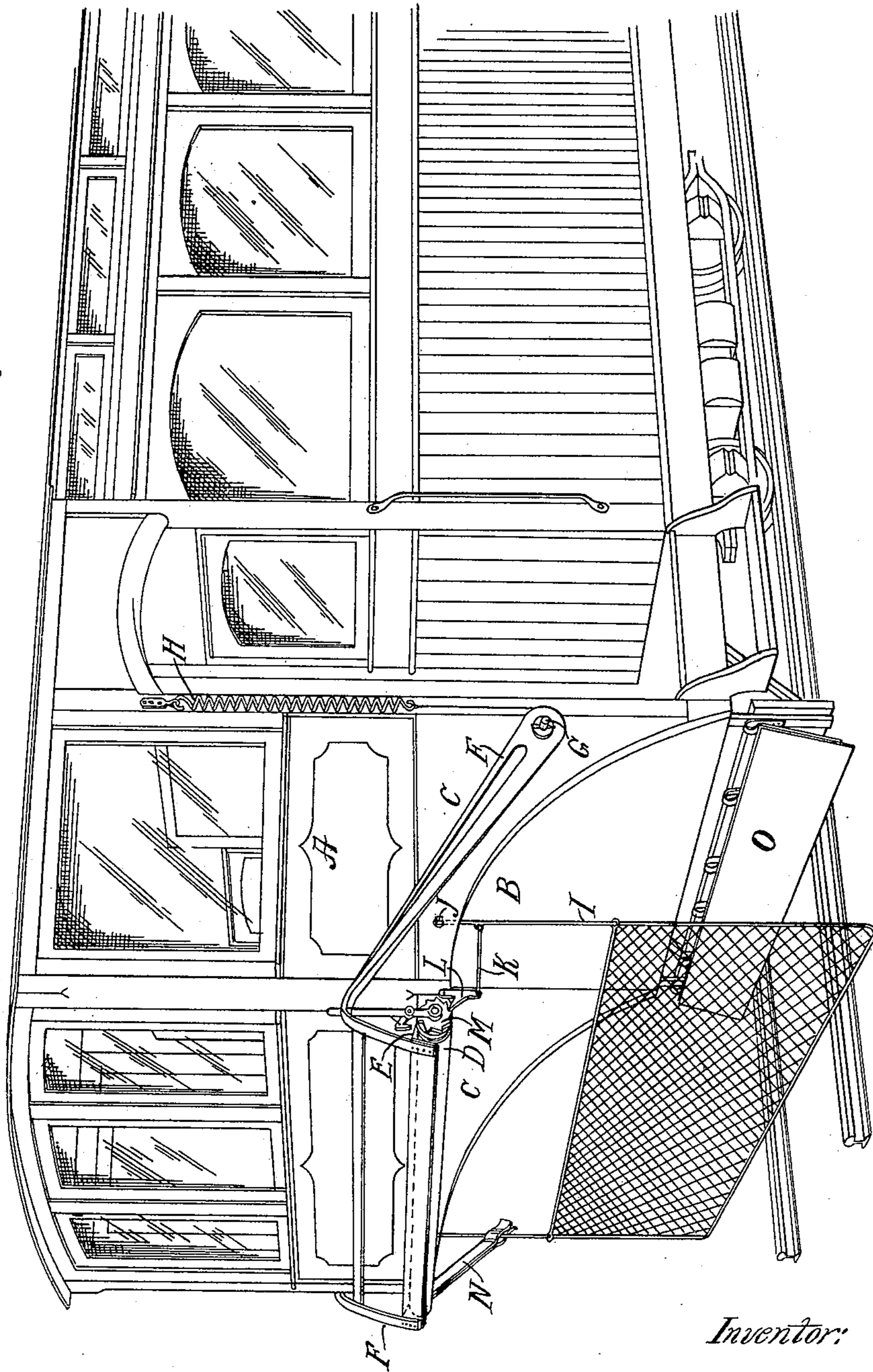
W. H. MARTIN.  
CAR FENDER.

(Application filed Mar. 31, 1897.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.



Inventor:

Witnesses:

Christopher Jackson  
John Hamilton.

William H. Martin.

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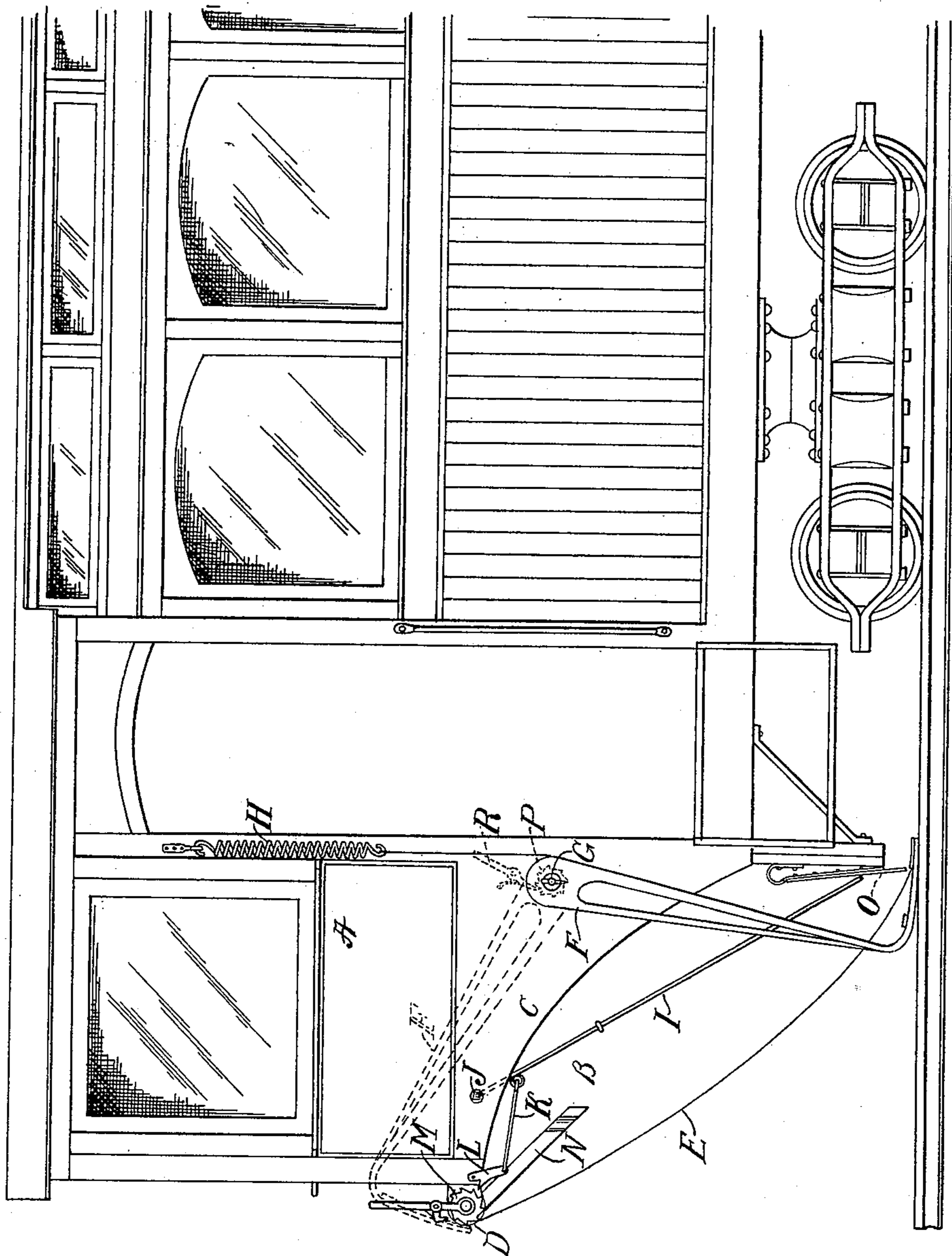
CAR FENDER.

(Application filed Mar. 31, 1897.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 2.



Witnesses:

Christopher Hickson  
John Hamilton

Inventor:

William H. Martin.

# UNITED STATES PATENT OFFICE.

WILLIAM H. MARTIN, OF LOS ANGELES, CALIFORNIA.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 607,118, dated July 12, 1898.

Application filed March 31, 1897. Serial No. 630,196. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. MARTIN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Car-Fenders, similar to my former patent life-saving device, No. 561,267, for which I am desirous of obtaining Letters Patent of the United States, of which the following is a specification.

My invention relates to improvements in car-fenders in which one or both ends of the car is cut away at the bottom, the bottom of said car forming a broken line; and the objects of my invention are to provide a car capable of accommodating passengers to its extreme ends and furnished with a life-protecting device without requiring space in front of the car in which to operate the life-protecting device or diminishing the seating capacity for carrying passengers. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view with the life-protecting device set ready for action in protecting life or limb; Fig. 2, a side view representing the exact position the device would assume had it met an obstruction.

In Fig. 1, A represents the end portion of the car directly over and above the cut-away portion B. C C are brackets. D represents a ratchet-roller, said ratchet-roller being secured to the front of the car and supplied with a canvas reef E. At either side of the car is a bent arm F, said arms being secured to the ends of a shaft G, said arms' shaft extending through the car and turning in the brackets C C, the inner side of one bracket being furnished with a dog R. Said shaft G has a ratchet P. Said dog R and ratchet P are for locking said arms' shaft G when said arms F are turned down. H represents one of the spiral springs. Said springs are for the purpose of operating said bent arms F and canvas reef E when the pendulous fence I meets an obstruction. I represents a pendulous pivoted fence, pivoted as at J, said fence I being supplied with a rod K, said rod connecting said pendulous fence I with a dog L and ratchet M. The ratchet is secured to said roller D, on which said canvas reef E is reefed. Said pendulous fence I, with said

rod K and dog L, keeps said ratchet-roller D and canvas reef E locked when said fence I remains unobstructed and unlocks said ratchet-roller D and canvas reef E when said fence I meets an obstruction. Elements F, H, and J are the same at either side of the car. Only one side can be shown. N represents an impression-spring, said spring being for the purpose of keeping said pendulous fence I from causing the ratchet-roller D and canvas reef E to become unlocked by sudden starting or stopping of the car. O represents a reciprocating belt, said belt being secured to gooseneck-shaped springs on a board beneath the car, said springs carrying said belt at an angle of about forty-five degrees when not cooperating with said pendulous fence I. Said belt O assumes a perpendicular position when cooperating with said pendulous fence I when said fence I has met an obstruction, as shown in Fig. 2.

In Fig. 2, A is the end portion of the car over the cut-away portion B; C, one of the brackets in which the arms' shaft G operates; D, the roller on which the canvas reef E has been unwound, said ratchet-roller D holding the upper edge of said canvas E, the bent arms F and the arms' shaft G having been turned down by means of said spiral springs H and locked with said dog R and ratchet P, said bent arms holding the lower edge of said canvas reef E hard down. I represents the pendulous pivoted fence, said fence I assuming the position it would be in had it met an obstruction, said impression-spring N having let go of said pendulous pivoted fence I, said fence I pulling on the rod K, said rod lifting said dog L out of said ratchet M of the roller D, on which said canvas reef E has been unwound by means of said spiral springs H and said bent arms F. O represents the reciprocating belt, said belt pressing against the bottom portion of said pendulous fence I, said belt O assuming a perpendicular position.

When the car is moving and the pendulous pivoted fence I meets an obstruction, the lower portion of said fence I is stopped by the obstruction, the upper portion of said fence advancing with the car, said fence I slipping out of the impression-spring N and pulling on the rod K, said rod lifting said dog L out of the ratchet M of the roller D, on which

said canvas E is reefed, said spiral springs H and bent arms F unwinding said canvas reef E, drawing said canvas E over and ahead of and beneath the obstruction and beneath  
5 the reciprocating belt O, said belt O and said pendulous fence I keeping the obstruction on the canvas E.

What I claim as my invention, and desire to secure by Letters Patent of the United  
10 States, is—

The combination in a car-fender of a pendulous pivoted fence and cut-away car, said car being cut under at one or both ends, the bottom of said car forming a broken line, and  
15 beneath said car a reciprocating belt, said belt cooperating with said pendulous fence, and

secured to the front of the car a ratchet-roller, said ratchet-roller being supplied with a canvas reef, spiral springs and bent arms for operating said canvas reef and ratchet-roller, 20 a rod and dog connecting said pendulous fence with said ratchet-roller for locking and unlocking said ratchet-roller and canvas reef, whereby said spiral springs and bent arms operate said canvas reef and ratchet-roller 25 when said pendulous pivoted fence meets an obstruction, all substantially as described.

WILLIAM H. MARTIN.

In presence of—

CHRISTOPHER HICKSON,  
HENRY E. FENDGE.