

No. 818,797.

PATENTED APR. 24, 1906.

J. STAWARTZ.
FENDER.

APPLICATION FILED AUG. 16, 1905.

2 SHEETS—SHEET 1.

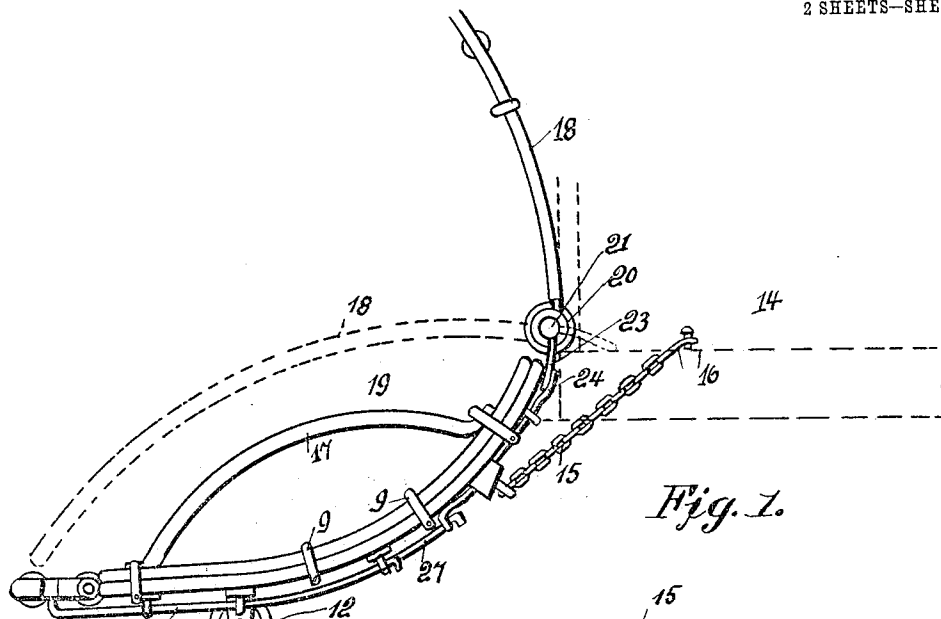


Fig. 1.

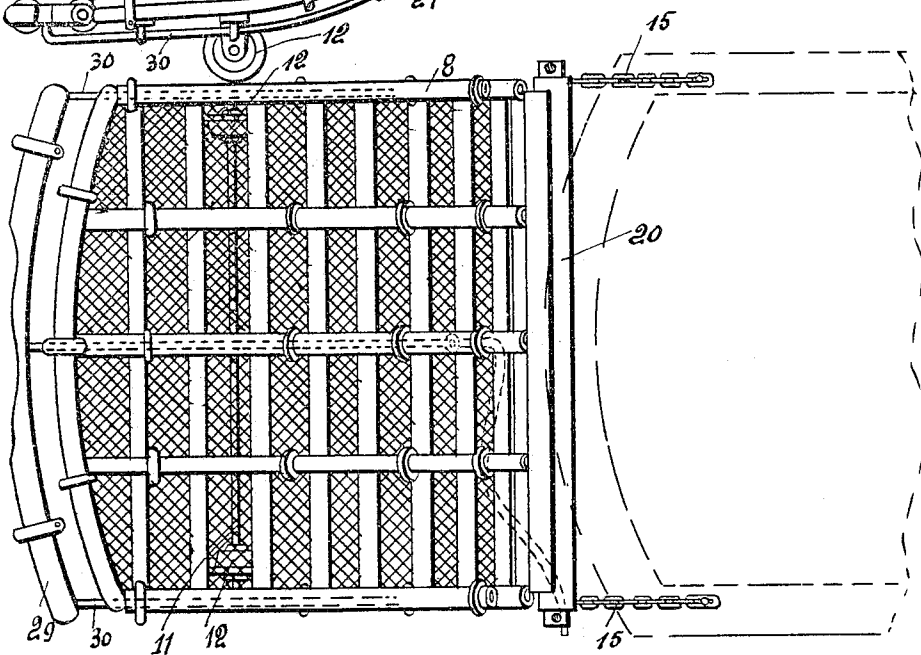


Fig. 2.

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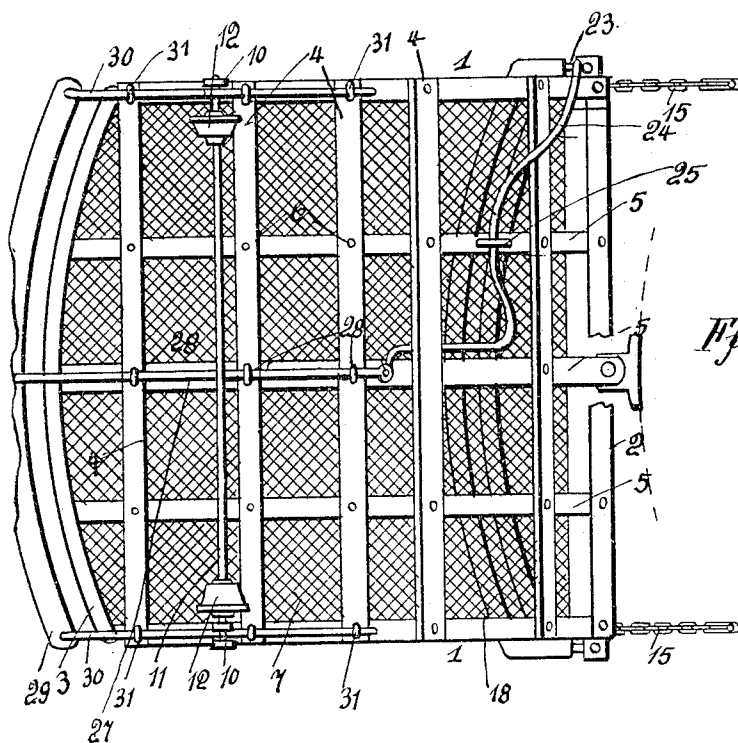


Fig. 3.

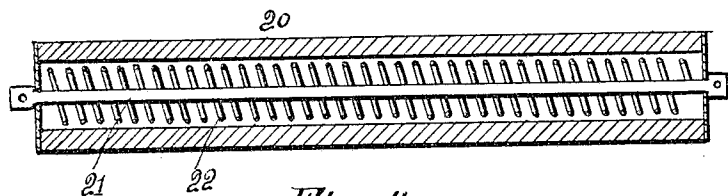


Fig. 4.

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UNITED STATES PATENT OFFICE.

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FENDER.

No. 818,797.

Specification of Letters Patent.

Patented April 24, 1906.

Application filed August 16, 1905. Serial No. 274,417.

To all whom it may concern:

Be it known that I, JOHN STAWARTZ, a citizen of the United States of America, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Fenders, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in fenders, and more particularly to that type of fender adapted to be used in connection with a street-car.

15 The primary object of this invention is to provide a novel form of fender which will prevent a person or object contacting with the working mechanism of a car, especially when the person or object is run down by said car.

20 Another object of this invention is the provision of novel means in connection with my improved fender whereby when a person or object is struck they will be caught in a basket-like structure and retained therein by a frame which is automatically released when the car-fender is struck, said frame descending over the structure to form an inclosure adapted to support the person or object until the car is stopped.

30 A further object of this invention is to provide a street-car fender which will not injure a person or object when it contacts with a person.

35 With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and then specifically pointed out in the claim, and referring to the drawings accompanying 40 this application like numerals of reference designate corresponding parts throughout the several views, in which—

45 Figure 1 is a side elevation of my improved fender, illustrating the same applied to a car and in an operative position. Fig. 2 is a plan of the same with one of the frames thereof removed. Fig. 3 is a bottom plan of the fender, and Fig. 4 is a longitudinal sectional view of a frame-support used in connection 50 with the fender.

To put my invention into practice, I construct the framework of my improved fender of strong and durable metal, and I preferably

employ a substantially rectangular frame consisting of side rails 1 1, a rear rail 2, and a 55 curved front rail 3. The side rails 1 1 are curved to form an arc-shaped framework, and between these side rails are arranged transverse bars 4, and between the rear rail 2 and the front curved rail 3 are arranged a 60 plurality of curved bars 5, these bars being secured to the transverse bars 4, as at 6, thus forming a metallic frame which forms the body portion of my improved fender. The entire upper surface of the frame is covered 65 with a wire or fabric netting 7, providing a basket-like structure which is adapted to support a person or object should they be run down by a car equipped with my improved fender. 70

Upon the frame just described I mount resilient tubing 8, such as rubber tubing, and this tubing is secured by clamps 9 to the bars and rails of the frame of the fender. To support the fender upon a car, the side rails 1 1 75 of the fender are provided with depending brackets 10, and between these brackets is journaled a shaft 11, upon which are mounted wheels 12 12, these wheels being adapted to travel upon the track upon which the car 80 14, equipped with my improved fender, travels. The rear rail 2 of the fender is adapted to rest against the front end of the street-car 14, and to support this end the side rails are connected by chains 15 15 to the sides of the 85 car, as at 16. This connection of the fender with the car permits of the same moving slightly independent of the car, which is necessary when the car passes around a curve.

To prevent a person or object carried by 90 the fender from falling from the same, I provide the side rails 1 1 with curved bars 17, formed by a resilient material, and to further insure the safe carrying of a person or object within the fender I employ an auxiliary 95 frame 18, which is preferably constructed by heavy wire covered with a resilient material, such as rubber. This frame is curved, as clearly illustrated in Fig. 1 of the drawings, and is substantially the same shape as the 100 fender, with the exception that it is used in inverted position, thus representing a convex frame, while the fender represents a concave frame, and when the auxiliary frame 18 is in a closed position, as illustrated in dotted lines, 105 Fig. 1, a compartment 19 will be formed be-

tween the two frames. The auxiliary frame 18 is mounted upon a cylindrical casing 20, which is carried by the street-car 14, and the frame 18 is connected to the ends of a shaft 5 21, which is mounted within the casing 20. Surrounding the shaft 21 is a coiled spring 22, and this spring is adapted to normally rotate the shaft and hold the auxiliary frame 18 in a closed position. To hold the auxiliary frame 10 in an open position, the auxiliary frame is provided with a depending arm 23 at one side of the fender, and this arm is engaged by a curved rod 24, mounted beneath the frame of the fender and movably connected thereto, as at 25. The curved rod 24 is pivotally connected, as at 26, to a rod 27, which is supported 15 in eyelets 28, carried by the transverse bars of the fender. The rod 27 assists in supporting a curved actuating-frame 29, the ends of this frame being supported by rods 30 30, which are slidably mounted in eyelets 31 31, carried by the ends of the transverse bars 4.

The operation of my improved fender is as follows: When a person or object strikes the 25 actuating-frame 29, the same is forced rearwardly, which, through the medium of the rod 27 and curved rod 24, the depending arm 23 of the auxiliary frame 18 is released, and the spring 22, extending within the casing 20, will 30 cause the auxiliary frame 18 to descend upon the fender and form a compartment which is adapted to retain the person or object until the car has been stopped. When the person or object is struck by the actuating-frame, 35 the sudden contact causes the person or object to be precipitated into the basket-like structure of the fender, where they will be safely carried until the car is stopped and the

auxiliary frame has been elevated to permit of the persons leaving the fender or the ob- 40 jects being removed.

By providing the hard surfaces of my improved fender with resilient material a cushion-like structure is provided which will prevent persons being struck by the same from 45 being injured, and it is thought from the foregoing that the construction, operation, and advantages of the herein-described fender will be apparent without further description, and various changes in the form, proportion, 50 and minor details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of the advantages thereof.

What I claim, and desire to secure by Letters Patent, is— 55

The combination with a car, of a curved framework supported in front of said car, resilient material mounted upon said framework, curved bars carried by the sides of said 60 framework, a spring-actuated auxiliary frame carried by said car, resilient material carried by said auxiliary frame, an actuating-frame mounted upon the first-named frame and adapted to normally hold said auxiliary 65 frame in an elevated position, means to release said auxiliary frame, means to support the first-named frame, substantially as described.

In testimony whereof I affix my signature 70 in the presence of two witnesses.

JOHN STAWARTZ.

Witnesses:

R. H. BUTLER,
JAMES J. CASEY.