(No Model.)

E. S. WILKINS.

FENDER OR GUARD FOR TRAMWAY CARS.

No. 588,205. Patented Aug. 17, 1897.

Fig. 1

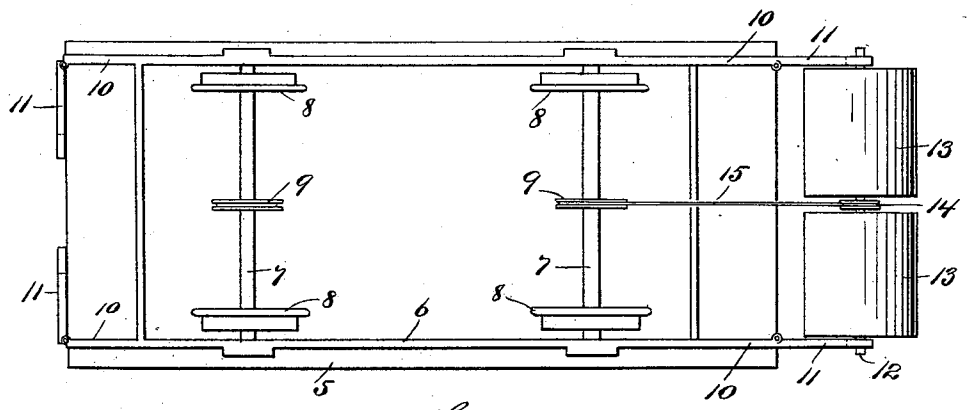


Fig. 2.

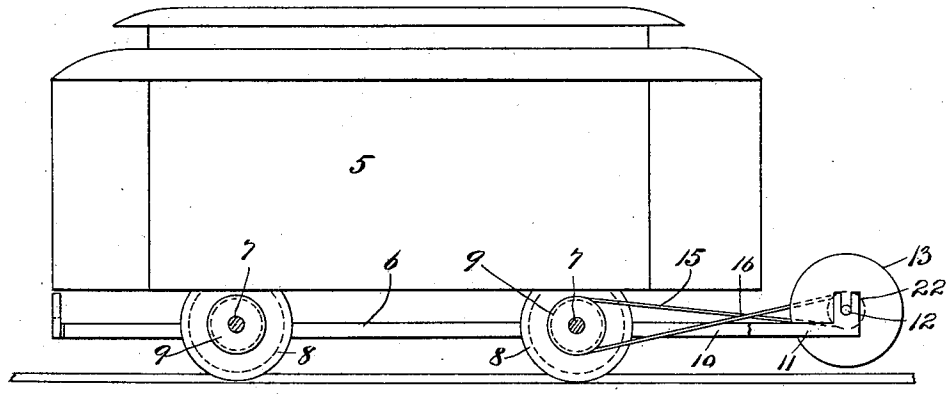


Fig. 3

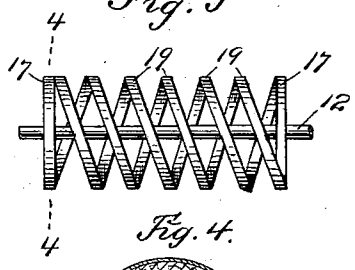
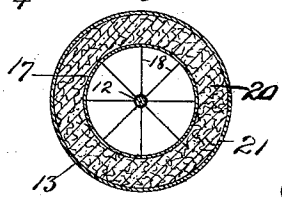


Fig. 4.



WITNESSES.

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FENDER OR GUARD FOR TRAMWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 588,205, dated August 17, 1897.

Application filed May 21, 1897. Serial No. 637,528. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SEABURY WILKINS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Fenders or Guards for Tramway-Cars, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to fenders or guards for tramway-cars; and the object thereof is to provide an improved device of this class which consists of a roller or rollers suitably supported in front of the car or at each end thereof, said roller or rollers being of novel construction and being adapted to be turned in a direction opposite to that in which the car is moving.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a bottom plan view of a car provided with my improved fender or guard; Fig. 2, a side view thereof, the truck-frame being in central longitudinal section; Fig. 3, a side view of the frame of one of the rollers which I employ, and Fig. 4 a cross-section of said roller complete on the line 4 4 of Fig. 3.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings I have shown at 5 an ordinary tramway-car provided with a truck-frame 6 and axles 7, on which are mounted the usual wheels 8, and each of the axles 7 is provided with a grooved wheel 9.

The sides of the truck-frame are projected to form arms 10, to which are hinged extensions 11, and mounted in the ends of the extensions 11 is a shaft 12, on which are mounted two similar rollers 13, and between the rollers 13 the shaft 12 is provided with a grooved wheel 14, and the grooved wheel 14 is geared in connection with the adjacent wheel 9 on one of the shafts 7 by means of a driving belt or band 15.

The driving-belt 15 is crossed, as shown at 16, in order that the rollers 13 may be revolved in a direction opposite to that of the wheels of the car, and it will be observed that in the drawings forming part of this specification I have shown the rollers 13 as applied to but one end of the car, but each end of the car is provided with the arms 10 and with the hinged sections 11, and it will be apparent that the rollers 13 may be changed from one end of the car to the other whenever desired or both ends of the car may be similarly provided.

The rollers 13 may be of any desired form and construction, and in Fig. 3 I have shown the framework of one of these rollers made according to the preferred form and in Fig. 4 a cross-section of said roller, and in the construction shown these rollers consist of end bands or rings 17, which are connected with the shaft 12 or a hub formed thereon by spokes 18, and the bands or rings 17 are connected by spiral-spring bands 19, and over these spiral bands 19 is placed a packing 20, of any desired material, and over said packing is placed a flexible covering 21.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

It will be understood that the rollers 13 are supported adjacent to the track and that when the car is in motion said rollers are revolved backwardly, and if a person or object should be struck thereby said person or object would be thrown from the track and the passage of said person or object beneath the car would thus be prevented.

My improved fender or guard is simple in construction and operation and well adapted to accomplish the result for which it is intended, and it will be apparent that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

It will also be seen that the arms 10 are provided with upwardly-directed extensions 22, in which the shaft 12 is mounted, said upwardly-directed extensions being provided with vertical slots in which the ends of said shaft are placed, but said shaft may be connected with said arms in any desired manner.

Having fully described my invention, I

claim as new and desire to secure by Letters Patent—

1. The herein-described fender or guard for tramway-cars, comprising an arm 10 having hinged extensions 11, a shaft 12 mounted in the end of said extensions, rollers 13, and a grooved wheel 14 mounted on said shaft, and a driving-belt 15 mounted on the said grooved wheel and on the axle of the car, said rollers consisting of end bands or rings 17 connected with the said shaft 12 by spokes 18, said rings being connected by spiral-spring bands 19, and a packing 20 placed on said bands, and a flexible covering inclosing the same, substantially as and for the purpose described.

2. In a fender or guard for tramway-cars, rollers mounted in suitable bearings in front of said car, and provided with means to revolve the same in a direction opposite to the direction in which the truck-wheels are revolved, said rollers consisting of end bands, mounted upon a suitable axle, said bands being connected by spiral-spring bands, a packing placed on said bands, and a flexible covering inclosing the same, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 19th day of May, 1897.

EDWARD SEABURY WILKINS.

Witnesses:
C. GERST,
S. L. HAWKSHURST.