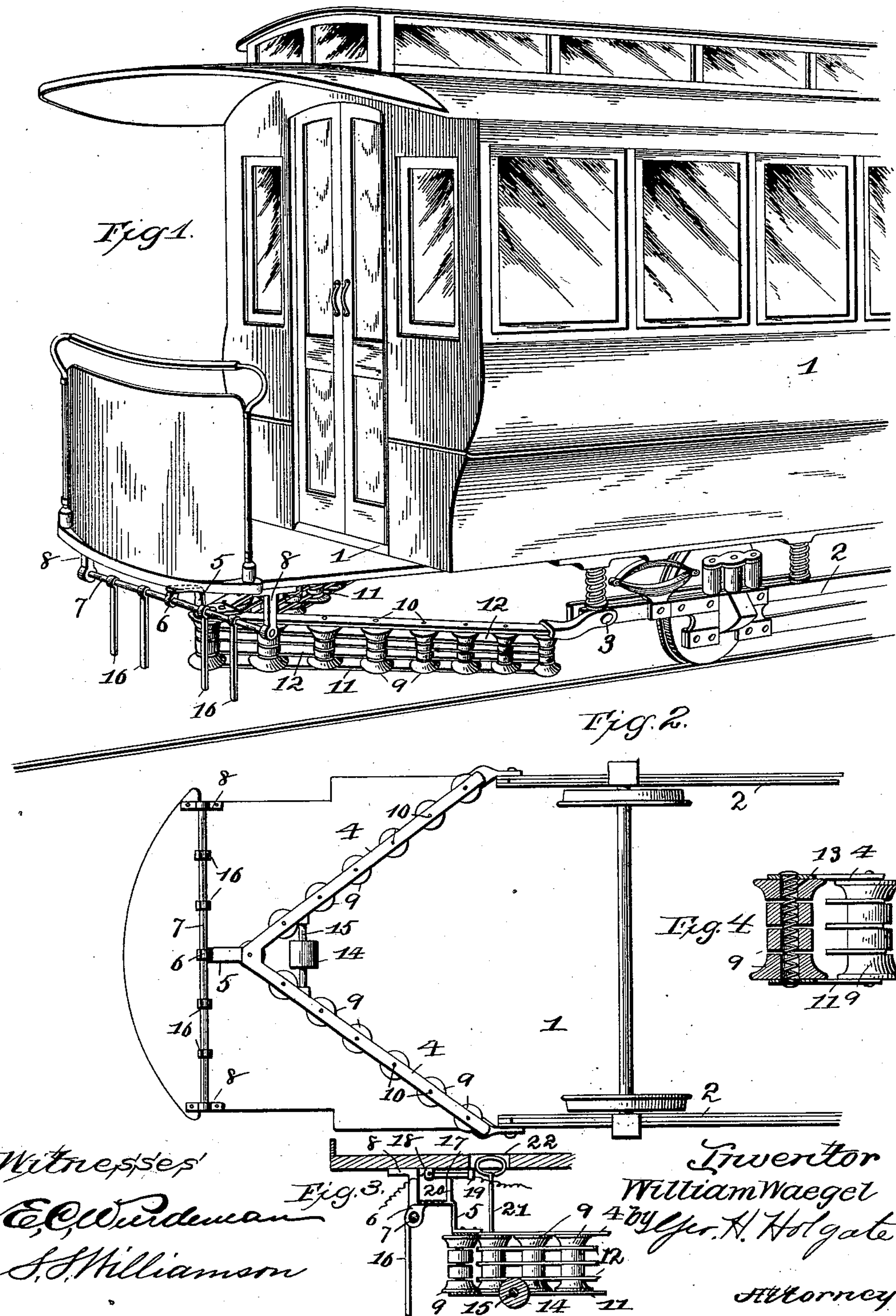


(No Model.)

W. WAEGEL.
CAR FENDER.

No. 558,538.

Patented Apr. 21, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM WAEGEL, OF PHILADELPHIA, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 558,538, dated April 21, 1896.

Application filed August 8, 1895. Serial No. 558,656. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WAEGEL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in car-fenders, and has for its object to provide such a device which, when coming in contact with a person, will be automatically put in a position to throw said person from the track before being reached by the wheels of the car and at the same time shut off the electric current from the motor of said car; and with these ends in view my invention consists in the construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by number to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective of one end of a car with my device attached thereto; Fig. 2, a bottom plan view thereof; Fig. 3, a detailed section illustrating the trip mechanism, and Fig. 4 a similar view showing the yielding bearing for the front roll.

Similar numbers denote like parts in all the figures of the drawings.

1 represents the car, and 2 the truck thereof, and to the forward end of this truck is pivoted at 3 the angle-frame 4, whose apex lies back of the front edge of the platform and is provided with the bracket 5, adapted to be engaged by the dog 6, secured upon the rod 7, which is journaled in the brackets 8, depending from the side of the platform.

9 are a number of rolls journaled upon pins 10, which latter are secured at one end in the frame 4 and having secured to their lower ends the bars 11. These rolls are formed in sections and have interposed therebetween the bars 12. The front roll, or that which is located at the angle of the frame, is preferably journaled upon a coil-spring 13, so that its several sections when coming in contact

with an obstruction will yield to modify the violence of said contact.

14 is a trundle-roll journaled upon the shaft 15, secured in suitable bearings upon the frame, and the object of this roll is to prevent the fender from coming in contact with the ground when lowered into operative position, as will be hereinafter set forth.

16 are a series of fingers depending from the rod 7 in the front of fender, so that an object coming in contact with these fingers will swing the dog 6 from out of engagement with the bracket 5, thereby permitting the fender to drop into its operative position and ride upon the roller 14 until the car is stopped.

17 is a circuit-breaker pivoted at 18 and having its contact-point at 19. This circuit-breaker is adapted to be held in its closed position by the extension 20 from the bracket 5 and is arranged in the circuit of the motor by which the car is propelled, so that when the fender is dropped, as before described, said circuit is broken by the falling of the circuit-breaker and thus the propelling power of the car shut off.

From this description the operation of my improvement will be obviously as follows: Should a car provided with my improvement when passing rapidly along its track come in contact with and knock down a person, the fingers 16 will be operated by contact with the person and the dog 6 withdrawn from engagement with the bracket 5 and the fender dropped to its operative position, when upon a further forward movement of the car said fender will come in contact with said person and thrust him to one side or the other from off the track, so that the wheels cannot pass over said person, and as the sides of the fender are provided with rolls it follows that but little friction will be generated between the fender and the person struck, but that it will readily shed said person to one side or the other, thus saving his life. By the dropping of the fender the power by which the car is propelled is shut off, so as to bring said car to a stop without care from the motorman, and this result may be accelerated by providing a suitable brake mechanism adapted to be put in operation upon the dropping of the fender.

To turn the fender to its normal elevated position, it is only necessary for the motorman to grasp the handle-bar 21 through the opening 22 in the platform and raise said fender 5 until the bracket is reengaged by the dog. If found necessary, the fingers may be held in their normal position by a spring, so as to prevent the dog being withdrawn from its bracket by accident or the momentum of the 10 car.

While I have shown the rolls made in sections and bars interposed therebetween, it is obvious that these bars might be omitted and the rolls made in one piece, the top and bottom of which are flared to form flanges, or 15 other modifications might be made in the construction without departing from the spirit of my invention, which rests in the broad idea of providing a fender having antifriction-rolls 20 so arranged as to shed a person from the track when struck by said fender.

Having thus fully described my invention, what I claim as new and useful is—

1. In a device of the character described, a 25 frame having journaled thereon, a number of rolls, a bracket carried by the frame, a tripping-dog adapted to engage the bracket, fingers for operating said dog, and a circuit-breaker held closed by the bracket and adapt-

ed to open when the fender is dropped, for 30 the purpose described.

2. In a car-fender, an angle-frame pivoted to the car, a number of rolls carried by said frame, a trundle-roll adapted to support the front end of said fender when in operative po- 35 sition, a bracket secured to the apex of the frame, a circuit-breaker held closed by the bracket and adapted to open when the fender is dropped, a dog to engage the bracket, a rod upon which the dog is secured and fingers se- 40 cured to the rod whereby the dog is operated, as and for the purpose described.

3. In a car-fender, a frame having rolls disposed upon its sides, a bracket secured to its apex and a trip mechanism for holding it in 45 a normal elevated position in combination with a circuit-breaker held closed by said bracket, and adapted to open when said fender is dropped, for the purpose of shutting off the propelling power of the car, substantially 50 as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM WAEGEL.

Witnesses:

S. S. WILLIAMSON,
SAMUEL L. TAYLOR.