

No. 673,361.

Patented Apr. 30, 1901.

S. H. EVANS.

CAR FENDER.

(Application filed July 5, 1900.)

(No Model.)

Fig. 1.

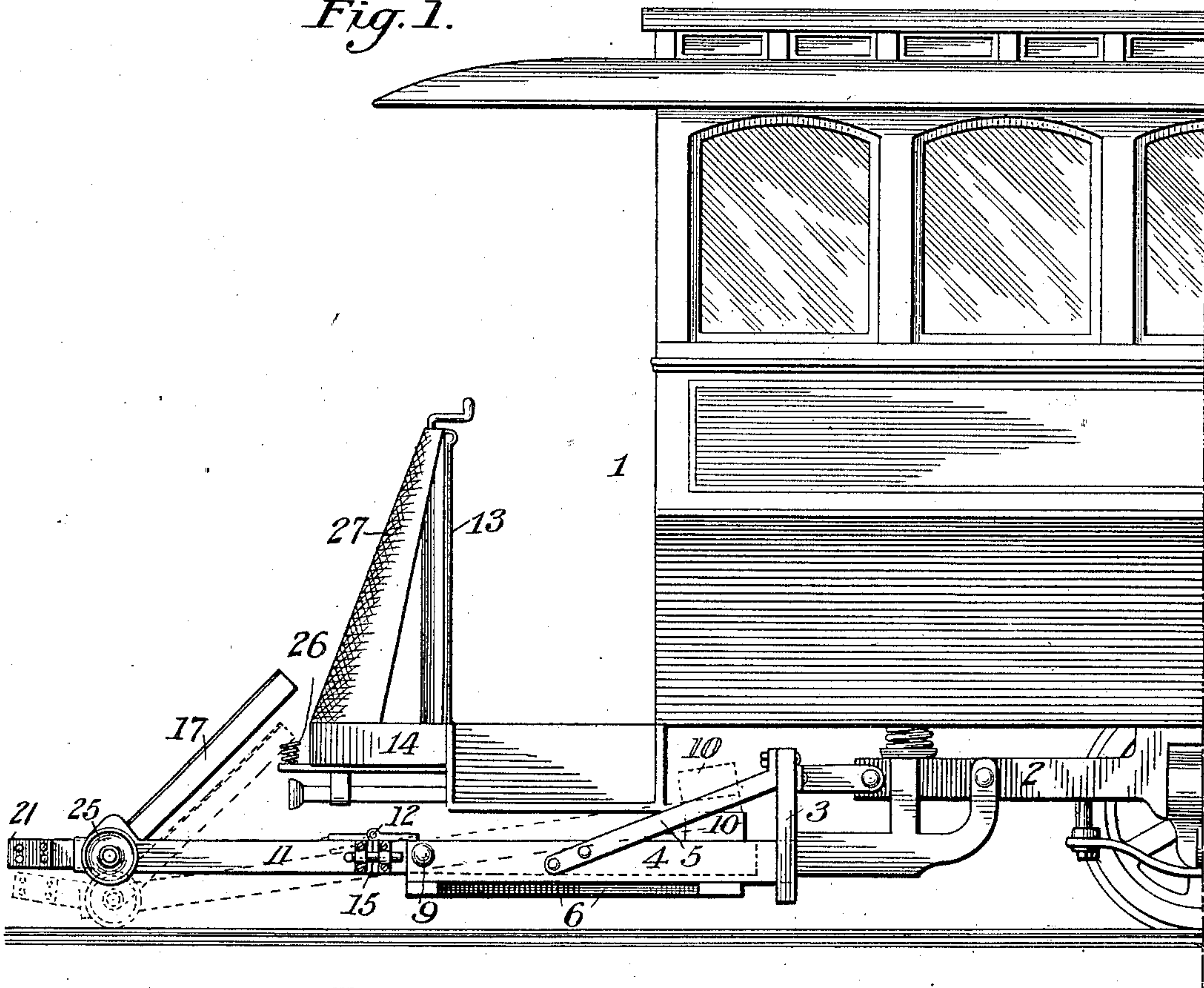


Fig. 2.

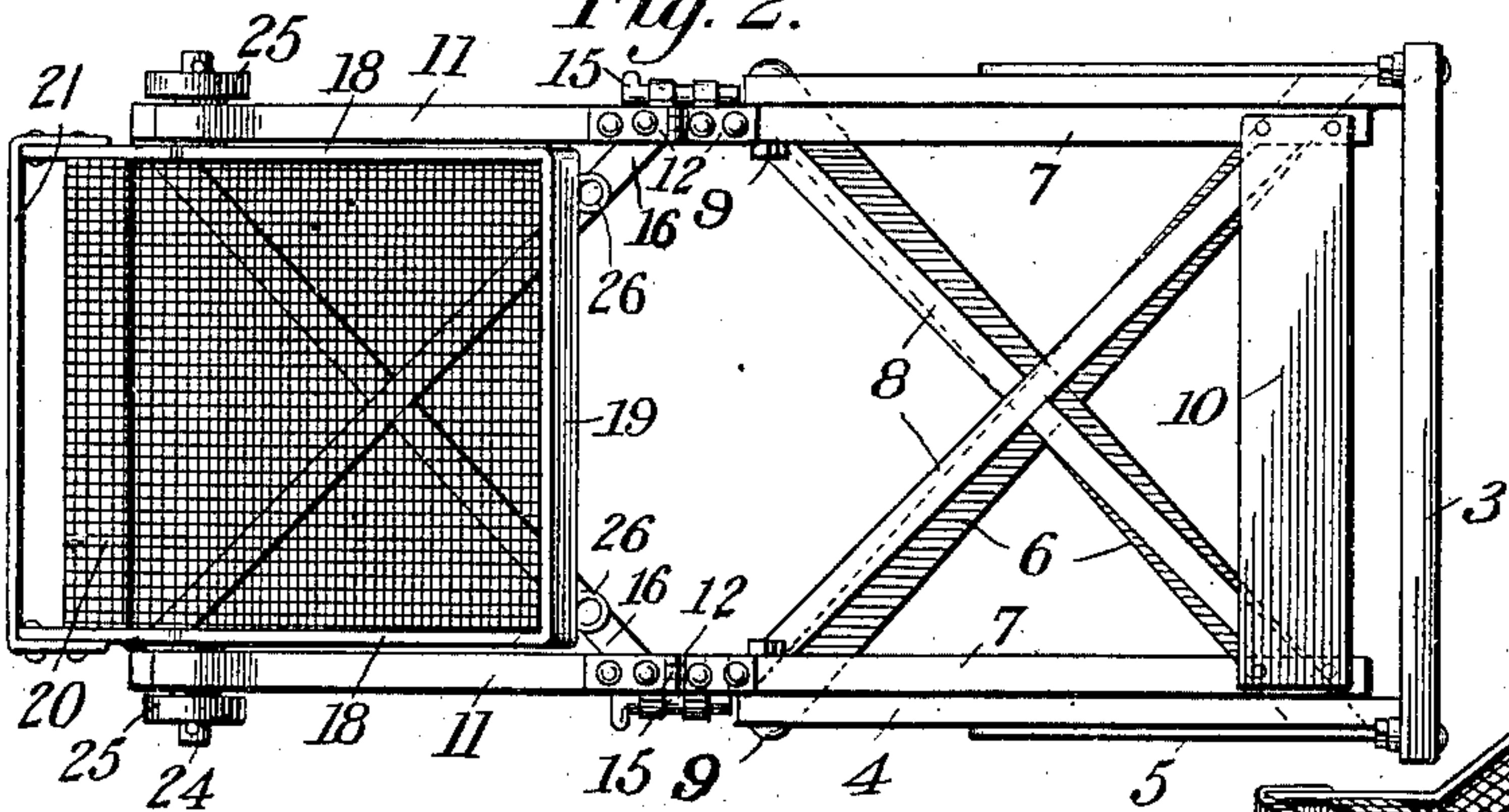


Fig. 3.

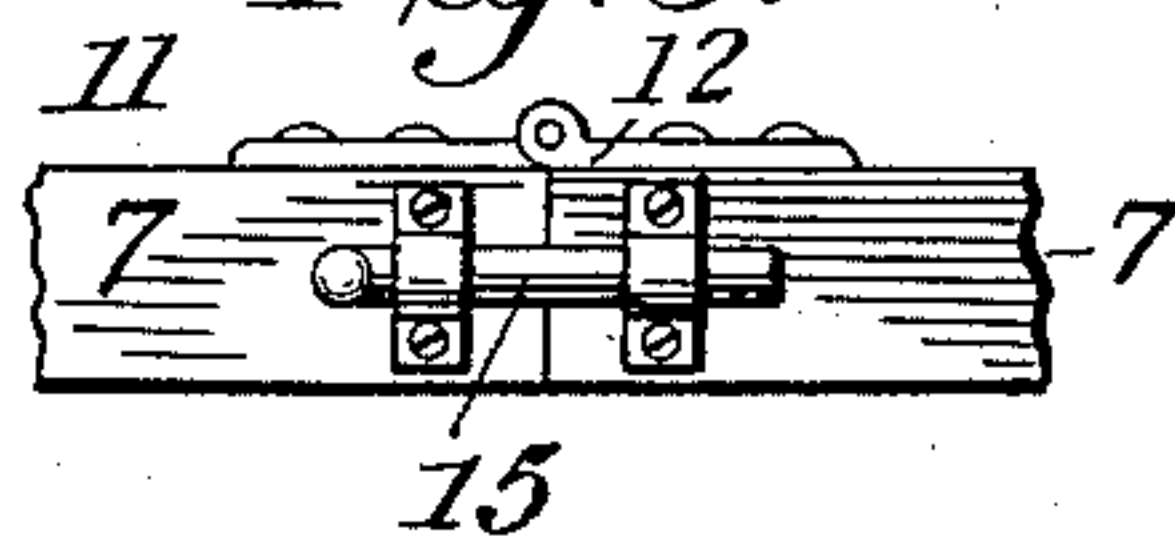
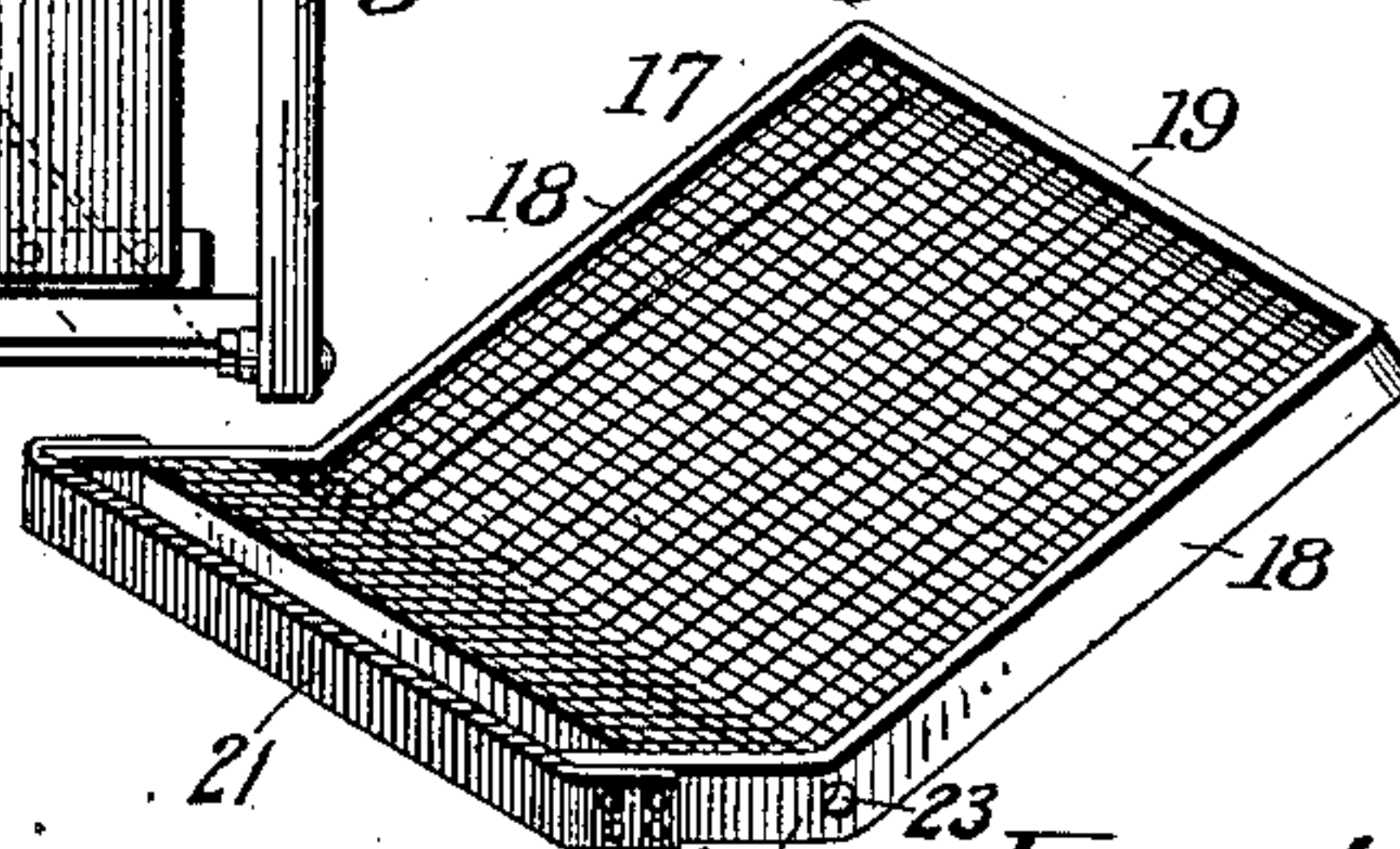


Fig. 4.



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UNITED STATES PATENT OFFICE.

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CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 673,361, dated April 30, 1901.

Application filed July 5, 1900. Serial No. 22,583. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HOWELL EVANS, a citizen of the United States of America, residing at Trenton, in the county of Mercer and State of New Jersey, have invented a certain new and useful Car-Fender, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to car-fenders; and the primary object of the invention is to do away with the oscillation or vibration of a street-car fender, and thus overcome a defect which is fatal to the efficiency of the car-fender and which frequently results in a person being caught under the projecting end of the fender and held until he is caught by the wheel-guard, or, in its absence, struck and mutilated by the car-wheels or projections from the car truck or body. By means of the invention hereinafter particularly set forth the fender is held with its forward portion a few inches above the surface of the road-bed, and on account of the fender being supported solely by the car-truck, which is not in any way influenced by the car-springs upon which the car is mounted, the fender is carried along without any oscillatory motion being imparted thereto by reason of the movements of the car-body, the fender being entirely independent of the car-body. At the same time the scoop or body-catching portion of the fender is arranged beyond the end of the car or in front of the platform and dashboard in a position to pick up the object or body before it has a chance to get beneath the platform, and the scoop is so mounted that when it comes in contact with a body or object the forward portion or end thereof is caused to drop to the ground or surface of the road-bed and pick up the object or body without injury. Means are also provided for cushioning the fall of a person when received in and picked up by the fender, and the fender is otherwise so constructed that the scoop or body-catching portion thereof may be compactly folded against the dashboard or end of the car when not in use. The several members of the fender and its frame are held in their normal operative positions by counterbalancing devices, the nature of which will hereinafter more fully appear. Other objects and advantages of the invention will

appear in the course of the subjoined description.

The invention consists in a car-fender embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a side elevation of one end of a car, showing the car-fender mounted thereon. Fig. 2 is a plan view of the car-fender. Fig. 3 is a detail elevation showing the connection between the two portions of the fender-frame. Fig. 4 is a detail perspective view of the scoop or body-catching member.

Similar numerals of reference designate corresponding parts in all figures of the drawings.

Referring to the drawings, 1 designates a street-car body mounted upon the usual truck 2, to which is attached the ordinary pilot-board 3. In carrying out the present invention parallel and forwardly-extending brackets 4 are provided, consisting of bars of sufficient strength attached rigidly at their rear ends to the pilot-board 3 and further connected therewith by means of oblique braces 5. In order to stiffen the brackets or bars 4, the latter are connected by cross-braces 6, as shown in Fig. 2.

The car-fender frame consists of an inner portion comprising parallel side bars 7, connected by cross-braces 8 and pivotally connected, as by bolts 9, to the outer ends of the brackets 4, the inner ends of the side bars 7 being connected by means of a counter-balance-weight 10, which serves to hold the rear end of the fender-frame normally depressed and resting upon the cross-braces 6 of the brackets.

The outer portion of the fender-frame comprises parallel bars 11, which are connected by hinges 12 to the bars 7, thereby enabling the outer portion of the fender-frame to be folded upward in front of the dashboard 13 and car-platform 14. The bars 11 and 7 are further connected by means of sliding lock-bolts 15, which prevent the projecting portion of the fender from folding upward accidentally. The side bars 11 are also connected by cross-braces 16.

Pivotally mounted on the outer ends of the

bars 11 is a tilting scoop 17, comprising side bars 18 and a cross-bar 19, connecting the rear upper ends of the side bars. The forward ends of the side bars are connected by a heavy cross-bar 20, which forms a counterbalance-weight for the scoop and holds it with the forward end normally depressed and its rear end elevated, as shown in Fig. 1. The cross-bar 20 is located slightly back of the front ends of the side bars 18, and the extremities of said side bars are connected by means of a cushion 21 in the form of a rubber or leather strip, which is adapted to yield when it comes in contact with a person and prevent the fender from maiming or injuring the person picked up thereby. The side bars 18 are bent intermediate their ends, as shown at 22, in the form of elbows, where they are provided with openings 23 to receive a shaft or axle 24, which passes therethrough and through the projecting ends of the bars 11, thus forming the pivotal connection between the scoop and the fender-frame. Supporting-wheels 25 are mounted upon the projecting ends of the shaft 24 for supporting the fender-frame upon the ground and the person or object carried by the fender when the forward end of the fender-frame is depressed. One or more cushioning-springs 26 are mounted upon brackets on the car and in the path of the scoop-frame and serve to cushion the downward movement of the rear portion of the scoop when it picks up a person or object.

The counterbalance-weight 20 serves to hold the scoop or body-catching member in the position shown in Fig. 1, ready to receive the object, while the counterbalance-weight 10, which is considerably heavier than the weight 20, holds the fender-frame and the scoop carried thereby in the position shown in Fig. 1, the fender as a whole being thus supported clear of the road-bed, but sufficiently close thereto to prevent the body of a person passing beneath the fender and being caught by the wheels or projecting portions of the truck. It will be seen from the foregoing description that the car-fender as a whole is supported solely by the truck, independently of the car body and springs, and is therefore not influenced by the oscillation of the car-body. This arrangement permits the car-fender to be carried along at a uniform distance above the surface of the road-bed and in close proximity thereto, thereby rendering the fender more effective and reliable in use. As an additional safeguard a flexible sheet or guard 27 may be arranged in front of the dashboard and platform and connected in any convenient manner to said parts. Another important advantage in attaching the fender directly to the truck resides in the fact that the fender follows the rails and does not project a considerable distance laterally in rounding curves.

I do not desire to be limited to the exact details of construction and arrangement set forth, but reserve the right to change, modify,

or vary the construction within the scope of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a car-truck, of a counterbalanced fender-frame fulcrumed on the truck and supported solely by the truck independently of the car-body, and a body-catching scoop hinged to the fender-frame and arranged in front of the car-body, substantially as described.

2. The combination with a car-truck, of a car-fender comprising a counterbalanced frame pivotally supported intermediate its ends solely by the truck independently of the car-body, and a scoop or body-catching member arranged in front of the car-body and supported pivotally intermediate its ends by said fender-frame, substantially as described.

3. The combination with a car-truck, of a car-fender comprising a counterbalanced fender-frame pivotally supported intermediate its ends solely by the truck independently of the car-body, and a tilting and counterbalanced scoop or body-catching member located in front of the car-body and pivotally supported intermediate its ends by the fender-frame, substantially as described.

4. The combination with a car-truck, of a car-fender comprising a tilting and counterbalanced fender-frame pivotally supported intermediate its ends solely by the truck independently of the car-body, a tilting and counterbalanced scoop or body-catching member located in front of the car-body and pivotally supported intermediate its ends by the fender-frame and means for cushioning the rearward movement of the scoop, substantially as described.

5. The combination with a car-truck, of a car-fender comprising a tilting and counterbalanced fender-frame supported solely by the truck independently of the car-body, and a tilting and counterbalanced scoop or body-catching member having a normally horizontal portion and an upwardly and rearwardly sloping portion, said scoop being pivotally mounted adjacent at the junction of the horizontal and sloping portions upon the fender-frame, substantially as described.

6. The combination with a car-truck, of a car-fender comprising a tilting fender-frame supported solely by the car-truck independently of the car-body, a tilting scoop pivotally mounted on the forward end of the fender-frame in front of the car-body, and supporting-wheels mounted on the forward end of the fender-frame for contact with the ground when the fender-frame is tripped, substantially as described.

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

SAMUEL HOWELL EVANS.

Witnesses:

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