

(No Model.)

H. A. GAMAGE & W. N. SCHMIDT.
FENDER FOR CARS.

No. 488,353.

Patented Dec. 20, 1892.

FIG. 1.

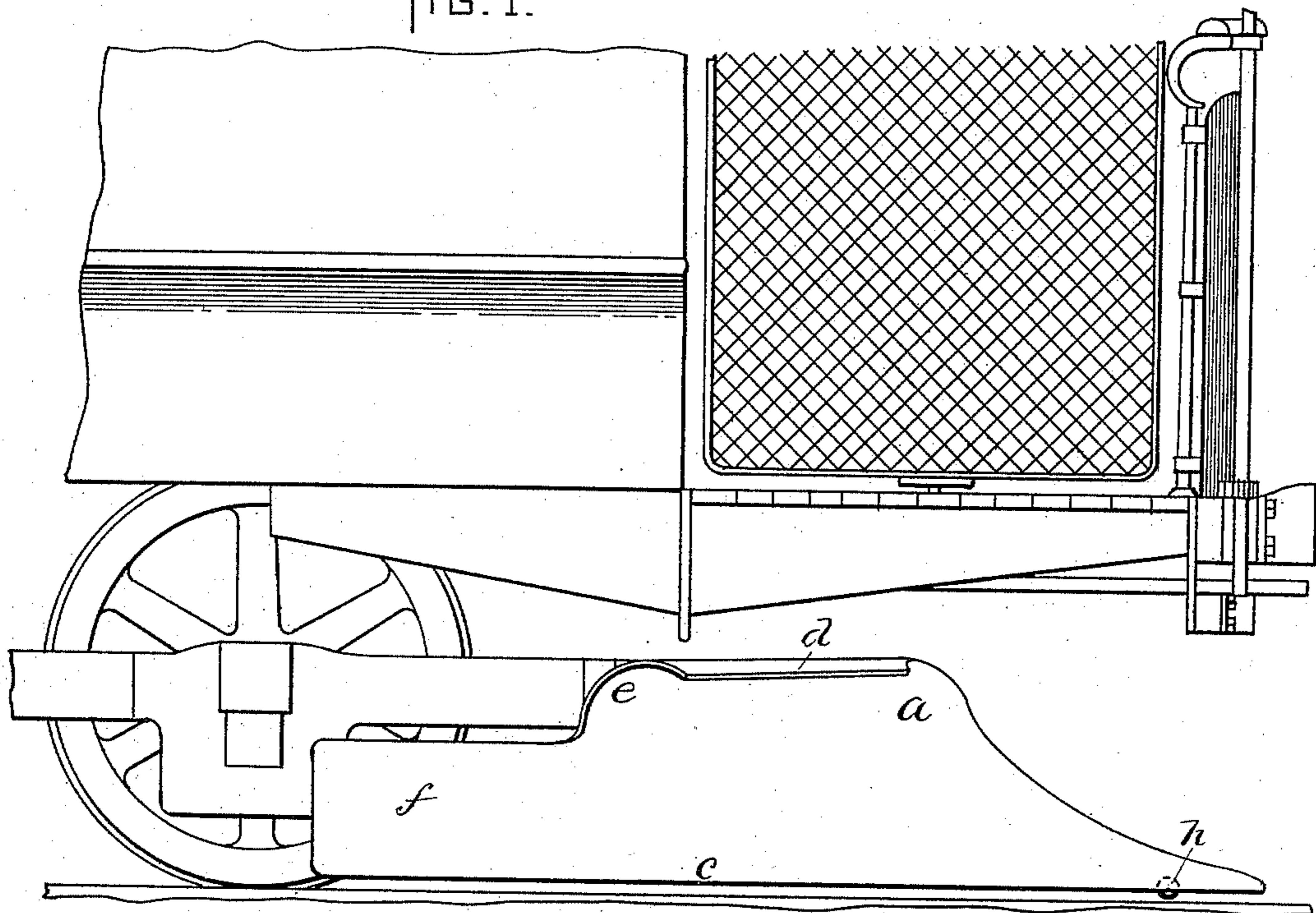


FIG. 2.

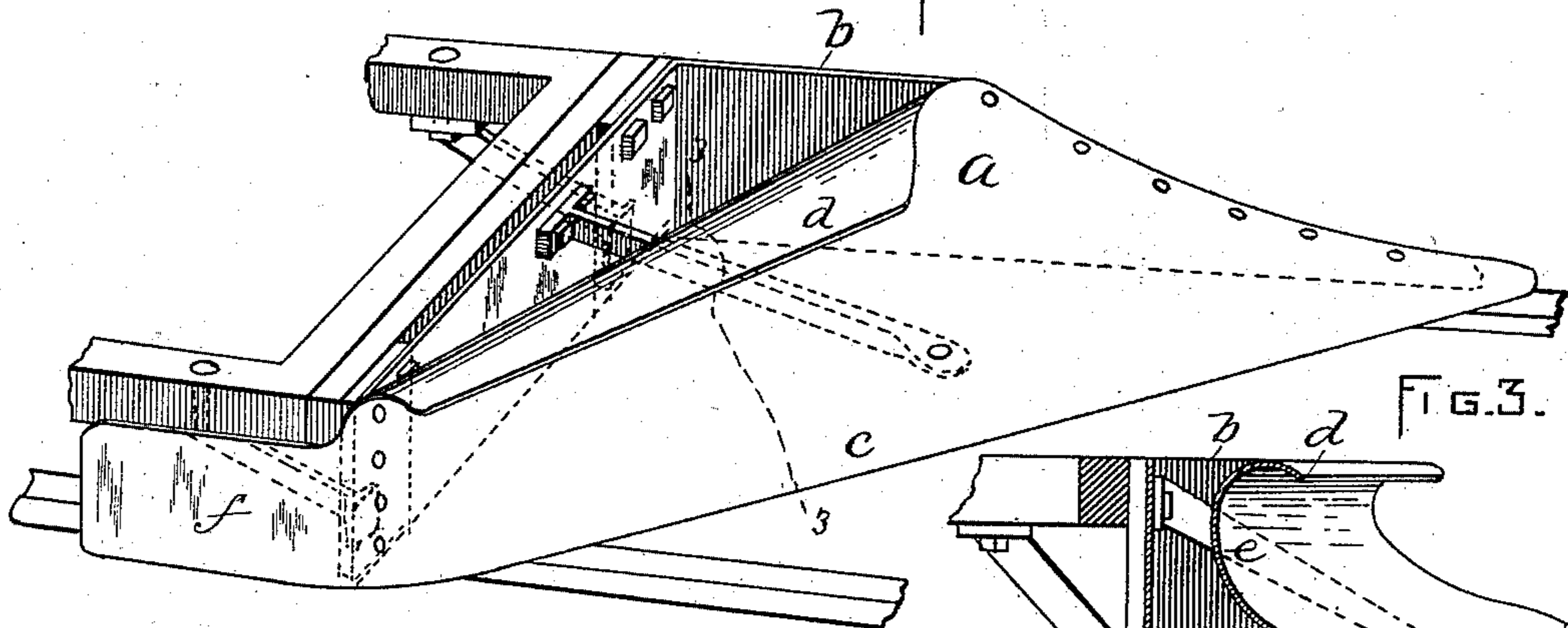


FIG. 3.

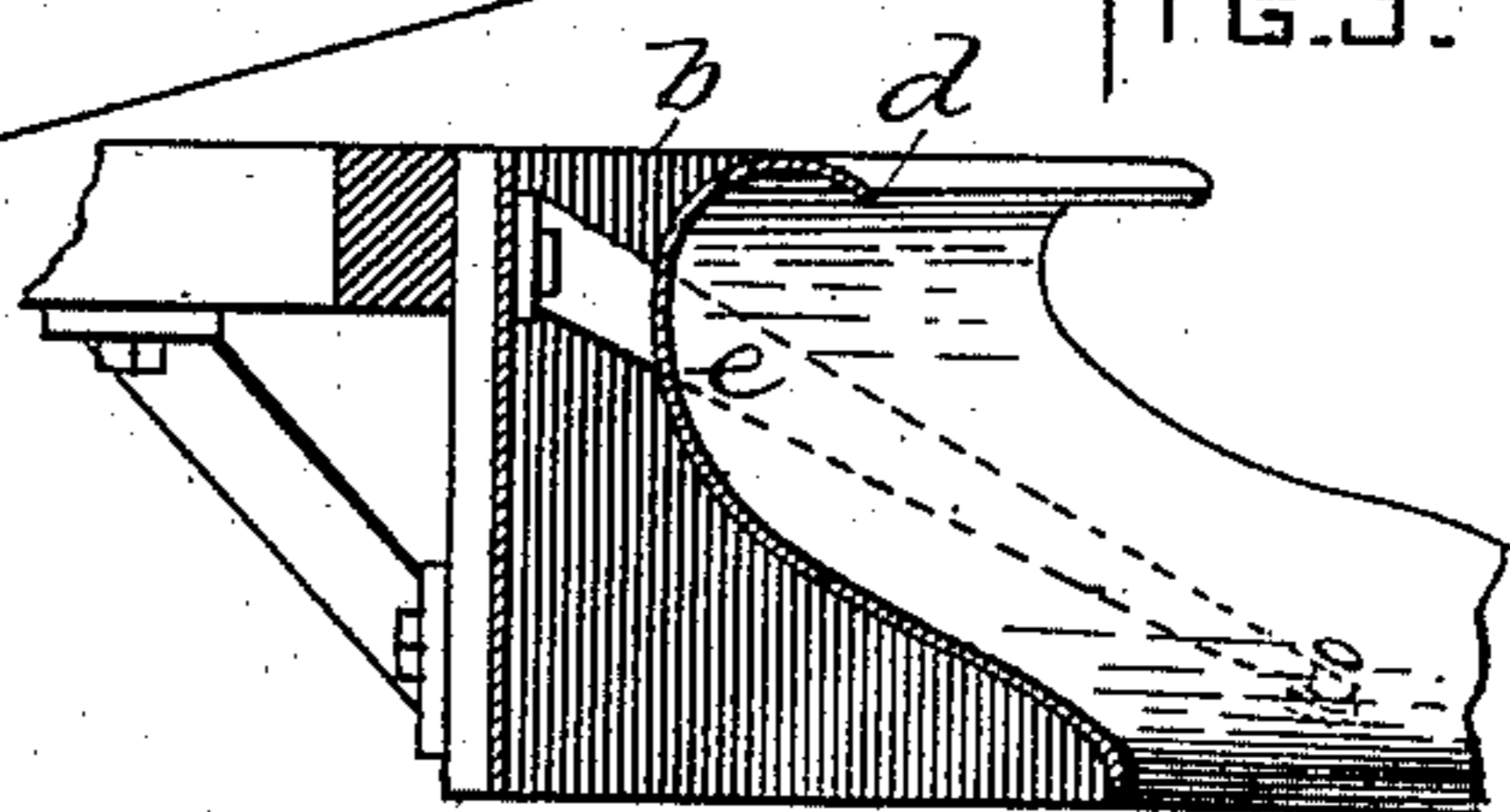
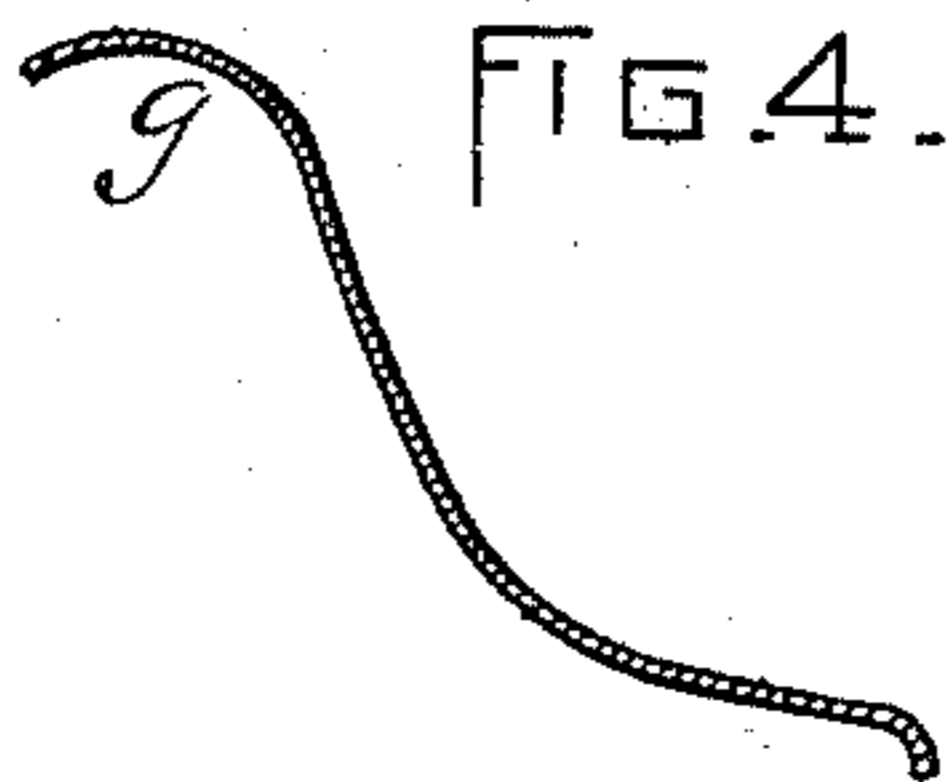


FIG. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY A. GAMAGE AND WILLIAM N. SCHMIDT, OF BOSTON, MASSACHUSETTS.

FENDER FOR CARS.

SPECIFICATION forming part of Letters Patent No. 488,353, dated December 20, 1892.

Application filed June 13, 1892. Serial No. 436,417. (No model.)

To all whom it may concern:

Be it known that we, HENRY A. GAMAGE and WILLIAM N. SCHMIDT, both of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Fenders for Cars, of which the following is a specification.

It is the object of the invention to provide a life guard or safety attachment for cars generally, and particularly for electric street cars which shall be adapted, in case a person or any object is struck by the car to not only prevent such person or object from passing under the car, but take them up and push them without harm from the track and out of the way of the car and its wheels.

The invention consists of a life-guard constructed substantially as hereinafter described and claimed.

Of the accompanying drawings forming a part of this specification, Figure 1 represents a side elevation of our device attached to the frame of a car truck, a sufficient portion only of the latter and the car body being shown to render the drawing capable of being understood. Fig. 2 represents a perspective view of the device and frame. Fig. 3 represents a sectional view of the device on the line 3 3 of Fig. 2. Fig. 4 represents a section showing a modified form of the device.

In carrying out our invention we provide a plow-shaped guard *a*, preferably formed of sheet metal of sufficient thickness to insure strength, and of a character capable of receiving and maintaining a high polished surface, so that in case of contact with a person or any object the momentum of the car will more readily deflect the body or object to the outside of the track.

As seen in Fig. 2 one side *b* of the guard is made straight and projects over the track outside the path of the trucks, and is preferably of such length as to extend lengthwise of the car as far as the end of the platform, so that it is impossible for a person to be thrown under the wheels from that side. The other side *c* is formed at an angle substantially like the "mold board" of a plow, and is formed in cross-section at its outer edge with a curved edge, as at *d*, Fig. 3, the line of the curve extending inwardly in a long radial curve *e*,

the contour of which is of sufficient radius to permit of a person lying thereon without rolling off.

The operation of the device is as follows—supposing a person to be struck by the car the curved edge of the guard running near the rail and on a line obliquely to the line of the track, will force itself under the body and the latter will roll onto the mold board and be either carried along upon the same or, if the momentum or speed of the car is sufficient, the body will slide along the mold board and be deposited at one side of the track clear from the path of the wheels.

We have shown an extension *f* of the mold board extending outside the wheel or truck in such manner as to prevent the body from coming in contact with said wheel.

The upper part of the mold board as shown in Figs. 1, 2, and 3, is curved outwardly sufficiently to prevent the body from being carried up over the top thereof and falling under the wheels. Instead, however, of curving the upper part of the mold-board outwardly, as described, it may be curved rearwardly, as shown at *g*, in Fig. 4, which might be preferable in connection with some constructions of car bodies. A wheel or roller *h* may be connected with the guard and held normally above the rail, but in such position to rest and ride upon the rail in case the guard should be depressed.

The guard may be secured to the truck frame or car body in any suitable manner, as, for instance, it may be bolted directly to the frame and braced by rods extending therefrom to the frame portion of the same.

The guard may be constructed of substantially a single piece of sheet metal struck up over a form, or it may be constructed in sections riveted together, or in any other suitable manner.

We claim:

1. A life-guard for cars adapted to be attached to a car body or truck frame, and to extend from side to side of the car across the track, said guard consisting of a sheet metal fender having its lower edge extending in a straight oblique direction from end to end, and from said lower edge, being inclined upward and rearward, the inclination gradually

increasing from one end to the other, substantially as and for the purpose set forth.

2. The combination with a car-body or truck frame, of a smooth metallic guard or fender
5 having its lower edge extending from a point outside the path of the wheels on one side in an oblique direction to a point outside the path of the wheels on the other side, said
10 guard or fender being inclined upward and rearward from said lower edge, the inclination gradually increasing from one end to the other, and straight rearward extensions from

the ends of said guard or fender, parallel with and outside the path of the wheels, substantially as described.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 11th day of June, A. D. 1892.

HENRY A. GAMAGE.
WILLIAM N. SCHMIDT.

Witnesses:

ARTHUR W. CROSSLEY,
A. D. HARRISON.