

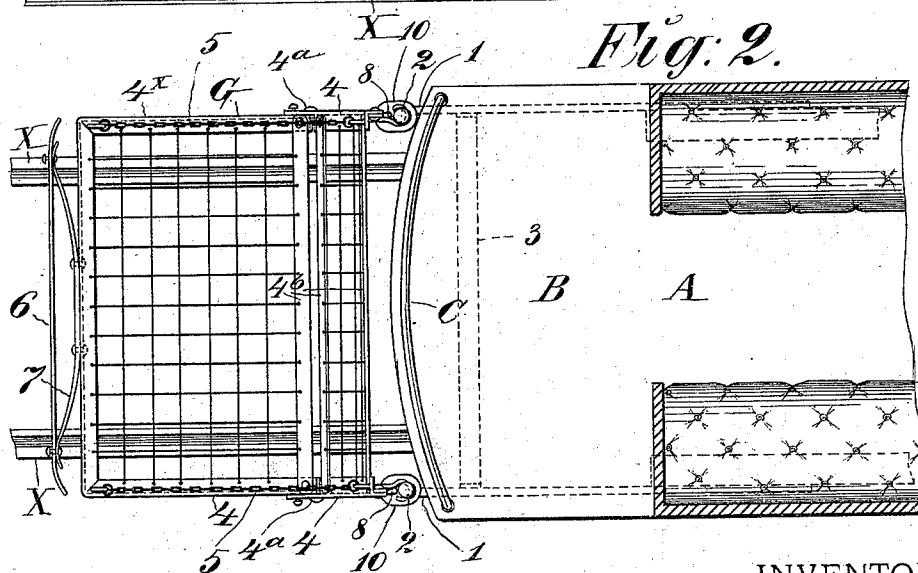
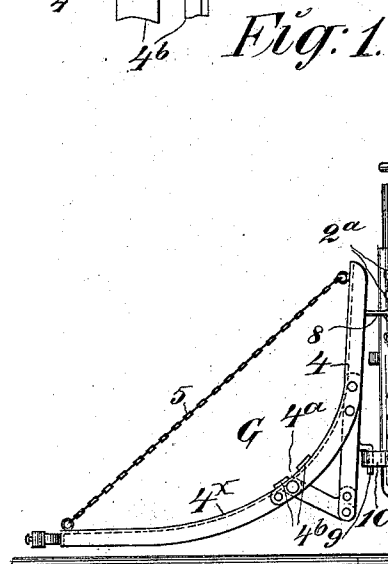
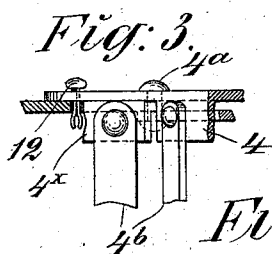
(No Model.)

H. BOEMERMANN & O. OLSEN.

CAR FENDER.

No. 557,951.

Patented Apr. 7, 1896.



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UNITED STATES PATENT OFFICE.

HENRY BOEMERMANN AND OLE OLSEN, OF BROOKLYN, NEW YORK.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 557,951, dated April 7, 1896.

Application filed December 13, 1895. Serial No. 572,006. (No model.)

To all whom it may concern:

Be it known that we, HENRY BOEMERMANN and OLE OLSEN, citizens of the United States, residing in Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

Our invention relates to the class of fenders for trolley and other street cars in which the fender is carried by the truck of the car and extends out to the front of the dashboard.

The object of our invention is to provide a removable fender of simple and inexpensive construction, and one adapted as well to be folded up, so as to occupy very little room in the car-house.

The invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of the fender, together with the front portion of the car; and Fig. 2 is a plan of the same. Fig. 3 is an enlarged detail view of the hinge-lock.

A represents the car-body; B, the platform; C, the dashboard; D, the truck-frame; E, the wheels, and F the springs between the truck-frame and car-body.

On the truck-frame D, at each side, is mounted a supporting-bar 1, which extends out to a point in front of the dashboard C, and bears a rigid upright 2, which sets in quite close to the dashboard, as shown. The two bars 1 are connected by a tie bar or bars 3, so as to be quite rigid. The uprights 2 are adapted to receive and carry a removable fender designated as a whole by G. This fender is constructed very simply and inexpensively of a frame covered with a netting. Preferably the frame will be of angle-iron, the side frames each consisting of an upright portion 4 and a projecting or horizontal portion 4^x, the two parts being hinged together at 4^a. The two side frames are connected together rigidly by tie-bars 4^b, and each has a chain 5 to form side guards and help to support the front end of the fender. To form a cushion at the front edge of the fender, it is provided with a rather flexible or yielding strip 6 of wood, carried by a cushion-spring 7, secured to the front bar of the fender. This cushion-strip will yield should the fender strike the body of a person on the track, and thus preserve him from serious injury.

The characteristic features of this cushion are its simplicity, its cheapness, and quality of yielding by flexure as well as by the compression of the spring.

The fender G is mounted removably on the uprights 2. On each of the upright portions 4 of the fender-frame is fixed an eye 8, adapted to pass loosely over the upright 2 on the car, and lower down on each upright 4 is a pin 9, which is adapted to engage a socket or hole in an adjustable bracket 10, adapted to be moved up and down on the upright 4 and fixed in position by a set-screw 10^a. To prevent the eye 8 from slipping up on the upright 4, the latter will be by preference provided with notches 2^a for the ring or eye 8 to engage. To prevent the bracket 10 from slipping, the upright 2 may have a series of recesses 2^b to receive the tip of the set-screw 10^a.

The front edge of the fender is only an inch or two above the level of the track-rails X, and this is permitted by the fender being independent of the car-body.

When the car is run into the car-house, the front portion of the fender is folded up by turning on the hinges 4^a, or it may be lifted off from the uprights 2 by tilting it back far enough to disengage the eyes from the notches and then lifting it. This may also be done at the end of the route when the car is to return without turning around. In this case the car will, of course, be fitted with side bars 1 and uprights 2 at both ends.

The object of the downwardly-projecting short pins 9, engaging sockets in brackets or projecting parts on the respective uprights 2, is to allow the fender G to be detached by a slight lift or movement, and the object in making the socketed bracket or part 10 adjustable on the upright is to enable the height of the fender above the track to be nicely regulated.

It is not important that the uprights 2 shall be perpendicular to the general level of the car-floor. They may as well incline a little forward.

It is desirable to have some means of locking the hinge in the fender G to prevent it from lifting on striking a body, and this may be a split pin 12, passed through coinciding holes in the plates at the hinge. This construction is clearly shown in Fig. 3, which is

an enlarged detail view of the hinged portion of the fender.

There may, of course, be two springs in the cushion device on the front of the fender.

5 Having thus described our invention, we claim—

1. The combination with a car, supporting side bars fixed to the truck-frame of the car and extending forward beyond the platform, 10 and uprights on the front ends of the said side bars, of a fender having rings or eyes at the upper part of its back adapted to take over the respective uprights on the side bars, and having downwardly-projecting short pins at 15 the lower part of its back to engage sockets in projecting parts on the respective uprights, whereby the fender may be detached by a moderate amount of upward movement thereof.

20 2. The combination with a car, of supporting side bars 1, fixed at their rear ends to the truck-frame of the car and extending forward beyond the front end of the car-platform, uprights 2 on the front ends of the respective 25 bars 1, adjustable, socketed brackets on the said uprights 2, and a fender G, having uprights at its rear end and said uprights being provided at their upper parts with eyes to en-

gage the uprights 2 and at their lower parts with pins to engage the sockets in the said 30 socketed brackets, substantially as set forth.

3. The combination with a car, supporting side bars fixed to the truck-frame of the car and extending forward beyond the platform, 35 notched uprights at the front ends of said side bars and socketed brackets on said uprights, of a fender having rings or eyes adapted to engage the said notched uprights and having pins, 9, adapted to engage the sockets in the 40 said brackets, substantially as set forth.

4. A car-fender having a cushion mounted on its front edge comprising a flexible strip of wood 6, mounted on a spring 7, fixed to the fender at its middle part and secured to the flexible strip 6 near the ends of the latter, 45 whereby the yielding or flexing of the strip supplements the yielding of the spring, as set forth.

In witness whereof we have hereunto signed our names in the presence of two subscribing 50 witnesses.

HENRY BOEMERMANN.
OLE OLSEN.

Witnesses:

HENRY CONNETT,
PETER A. ROSS.