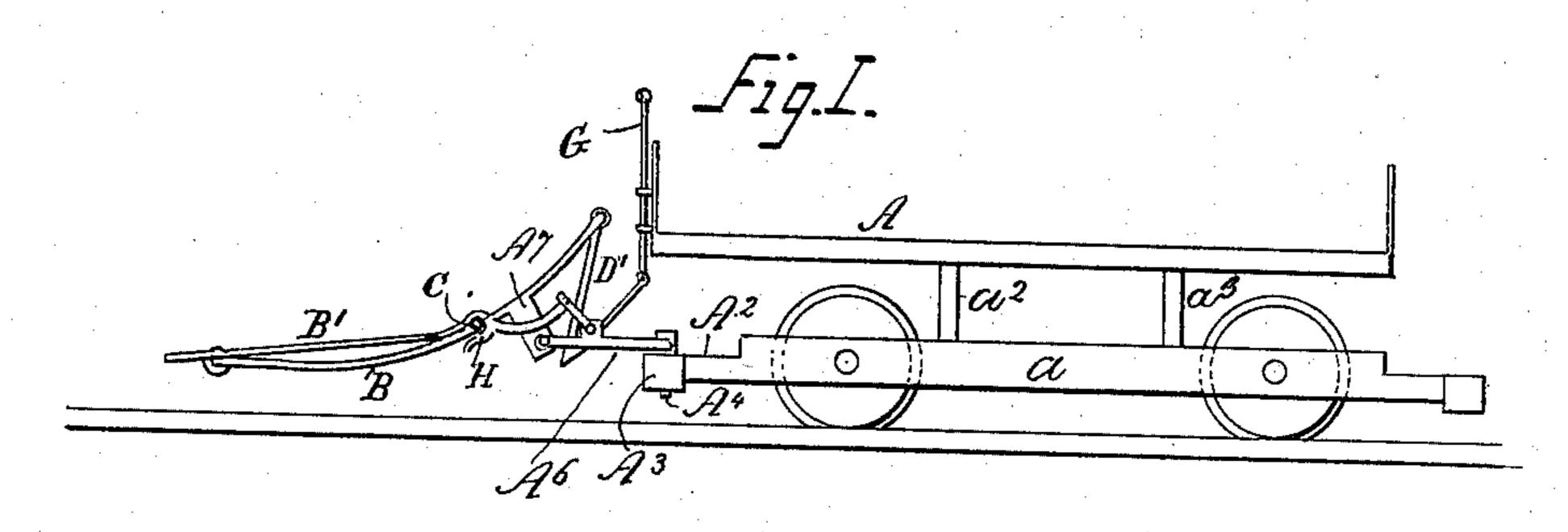
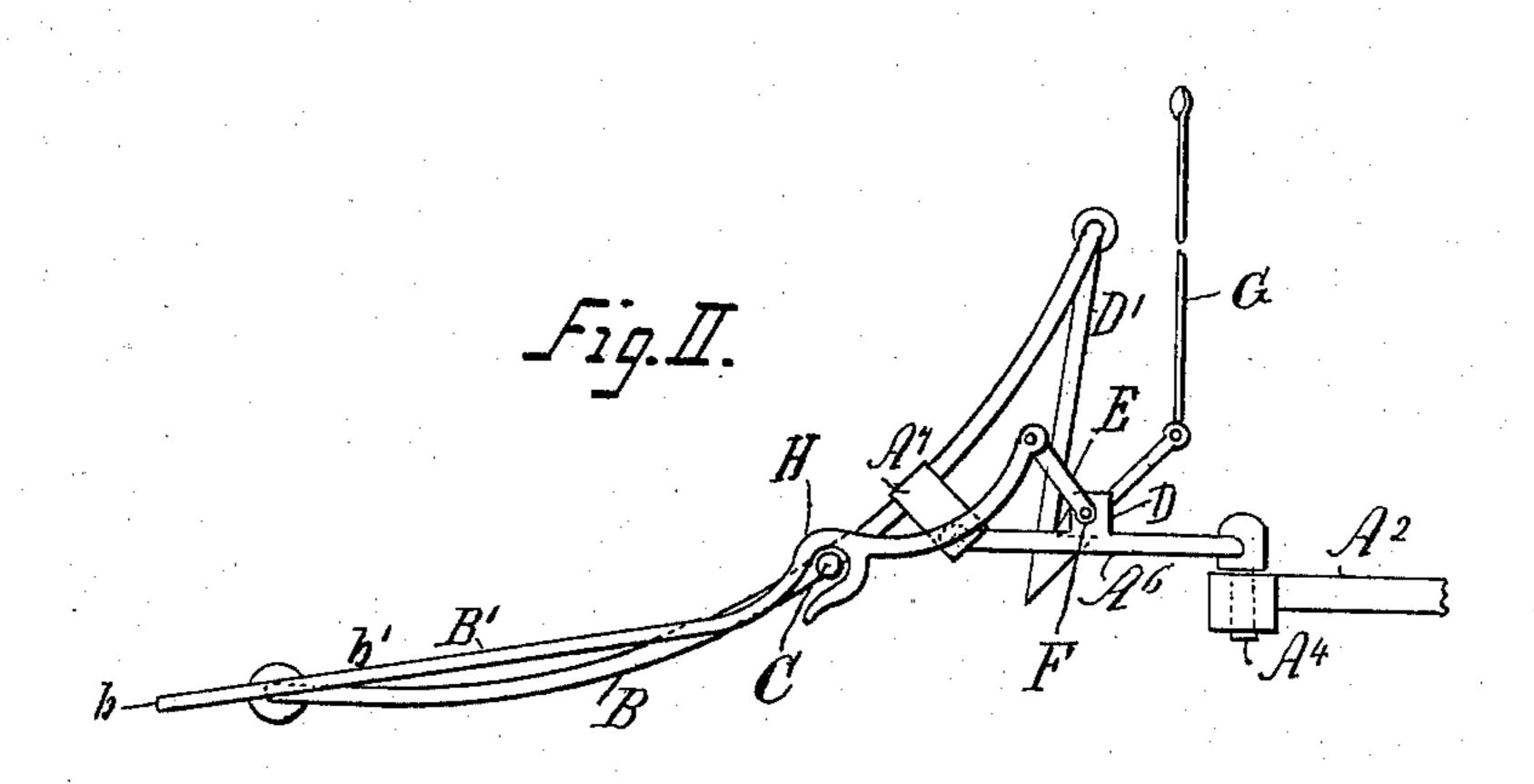
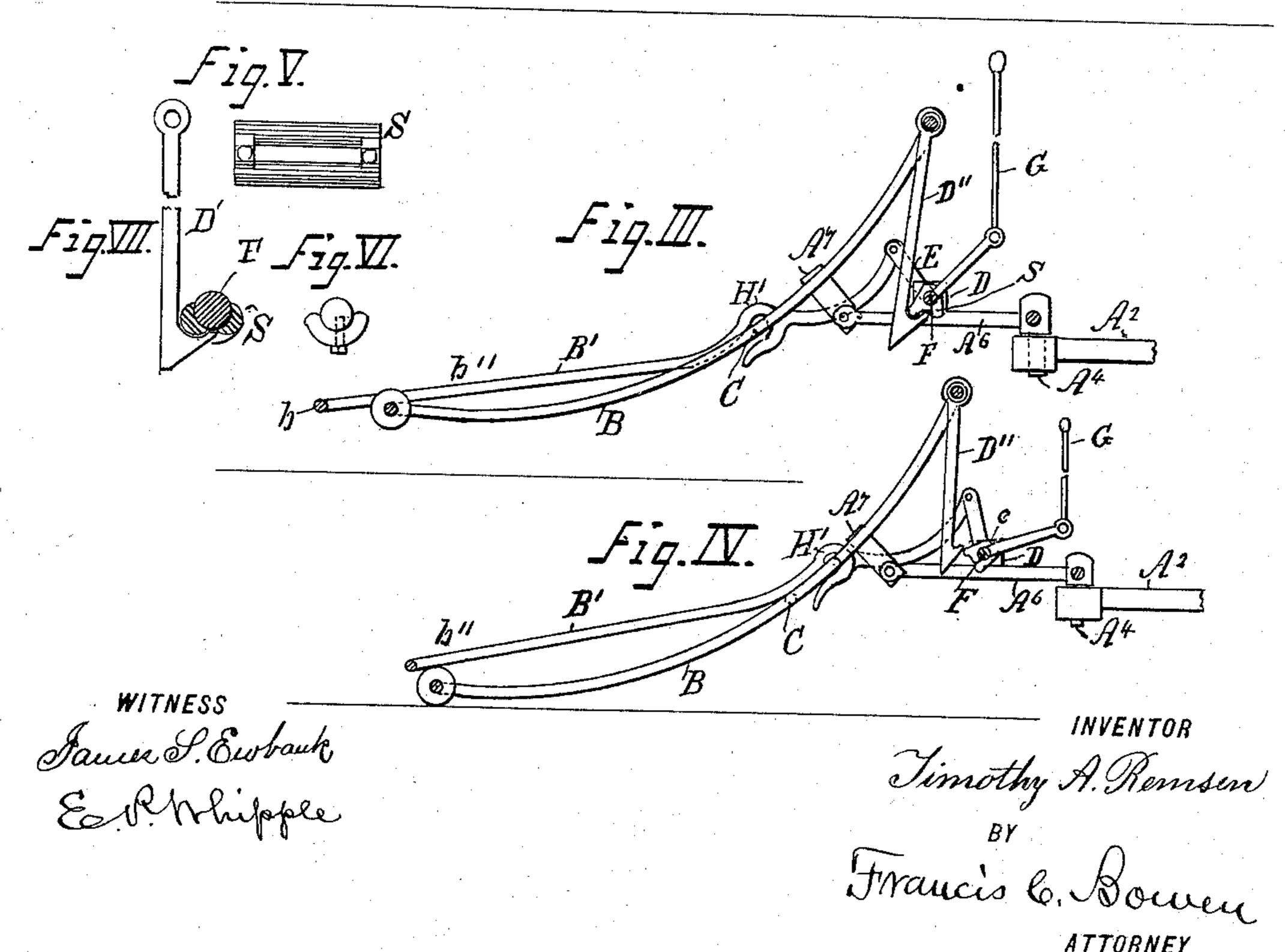
T. A. REMSEN. CAR FENDER.

(Application filed Dec. 15, 1897.)

(No Model.)







United States Patent Office.

TIMOTHY A. REMSEN, OF NEW YORK, N. Y., ASSIGNOR TO HENRY M. LEE, OF SAME PLACE, AND MARY E. REMSEN.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 609,394, dated August 16, 1898.

Application filed December 15, 1897. Serial No. 661,988. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY A. REMSEN, a citizen of the United States, and a resident of New York, (Brooklyn,) in the county of Kings and State of New York, have invented a certain new and useful Car-Fender, of which the following is a specification.

My invention relates to a novel fender for electric tramway-cars; and it consists of the construction, combination, and arrangement of the operating parts of the device, as hereinafter more fully described in the specification, illustrated in the accompanying drawings, and pointed out in the appended claims.

The object of my present invention is to provide an automatic fender of extremely simple and inexpensive construction that may be readily attached to any electric tramway-car without having to make numerous changes in the brake and mechanism now covering the entire bottom of the car, it being an improvement on my Letters Patent of the United States for fenders, No. 586,270.

In the accompanying drawings, Figure 1 represents so much of a street-car in side elevation as will suffice to illustrate the application of my invention in its extended position. Fig. 2 is a similar view of my invention, on a larger scale than Fig. 1, with the car removed. Fig. 3 represents a longitudinal section on the opposite side of Fig. 2. Fig. 4 represents a view of my invention in its extended position, showing it down on the track. Figs. 5, 6, and 7 represent details of parts.

Similar letters of reference indicate corresponding parts.

The letter A designates the platform of an ordinary car, on the under side of which and parallel to the sides thereof are two bars a a'40 and held at either end to the bottom of the car by suitable braces a^2 a^3 and to each end of the side bars a a' are arms A2, having sockets A³ on their ends to receive the pins A⁴ A⁵ on the supporting-frame A⁶, to the ends of which is pivotally supported the wire frame B at the sides thereof by means of a plate A7, said supporting-frame A⁶ pivotally suspending the rectangular frame B' by means of an eye-plate D, through which plate the cross-50 bar passes, said cross-bar being engaged by the suspension-hooks D' D" on the rear of the wire frame B.

The letter B' designates a rectangular frame,

of iron pipe, and consists of a front portion b and sides b' b", having hooks H H' formed 55 about one-fourth the distance from their inner ends to engage the lugs C on each side of the wire frame B and pivotally connected at their inner ends to the cross-bar F by means of the intermediate crank E, the cross-bar F being 60 pivotally fitted in the supporting-frame A⁶.

Near the end of the cross-bar F is connected a handle G, by means of which the motorman may operate the fender by releasing the same.

On the cross-bar F are curved slotted plates 65 S, Figs. 5 and 6, near each end thereof, as at cc, to more positively and firmly engage the hooks D' D", suspended from the inner side of the wire frame B, and which hooks D' D" are automatically disengaged from the cross- 70 bar F when an obstruction strikes the forward part of the frame B' and throws the frame back, thereby turning the cross-bar and releasing the hooks D' D" from the slotted curved plates S on the cross-bar F, or the 75 hooks D' D" may be disengaged from the curved plates S on the cross-bar by the motorman operating the handle G.

What I claim as new, and desire to secure

by Letter Patent, is—

1. In a car-fender the combination of the rigid supporting-frame, a revolving cross-bar attached thereto with portions thereof provided with curved slotted plates to engage suspension-hooks on the rear portion of the 85 wire frame which are automatically released when the frame B' is thrown back, substantially as shown and described.

2. In a car-fender the combination of the rigid supporting-frame attached to the carbody, having a cross-rod attached thereto with portions thereof provided with curved slotted plates to engage suspension-hooks on the rear portion of the wire frame, a wire frame pivotally suspended in the supporting-frame, an extension-frame having hooks on each side thereof to engage lugs on the wire frame, a lever connected to the cross-bar by means of a crank to operate the device from the dash-board of the car, substantially as shown and loo described.

TIMOTHY A. REMSEN.

Witnesses:
CHAS. A. HAVILAND,
FRANCIS C. BOWEN.