No. 705,814. Patented July 29, 1902.

# J. BAUER.

## FENDER OR GUARD FOR TRAMWAY CARS.

(Application filed Mar. 19, 1902.)

(No Model.)

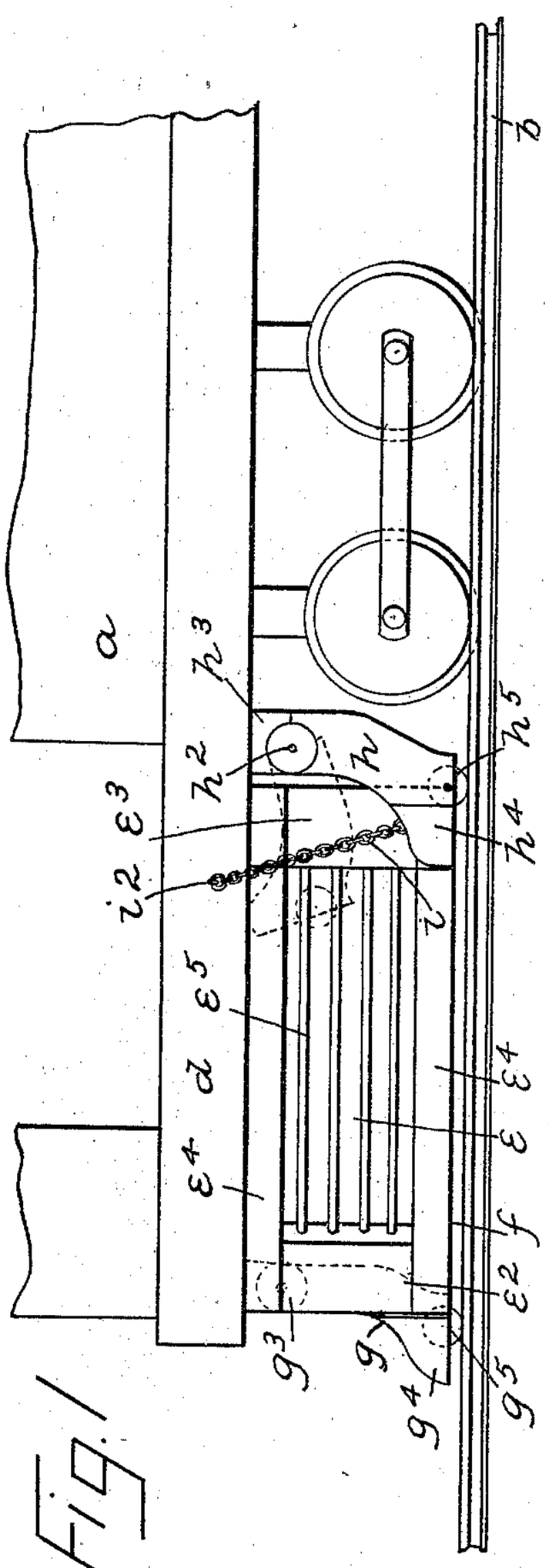


Fig. 1.

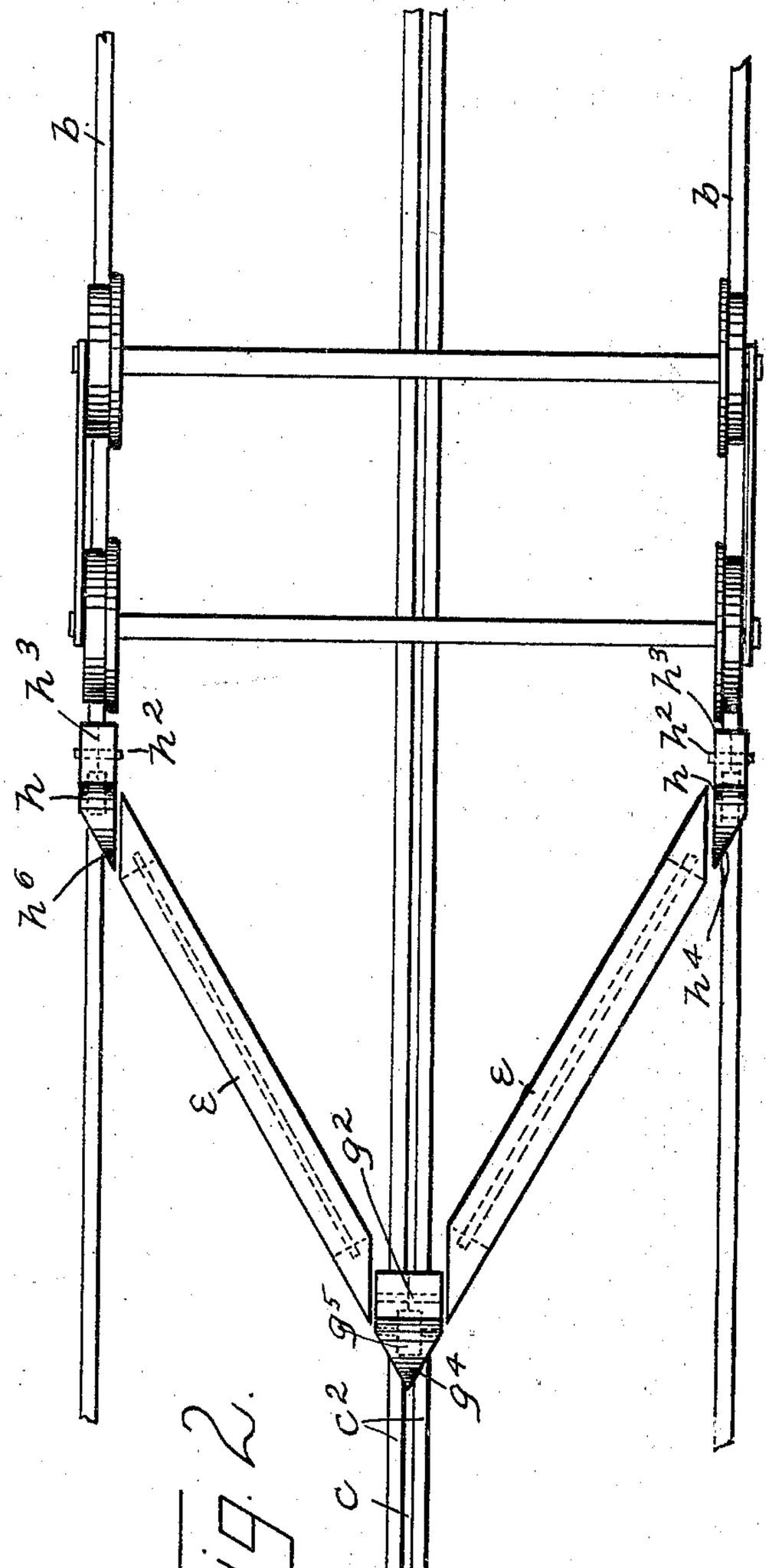


Fig. 2.

WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN BAUER, OF NEW YORK, N. Y.

## FENDER OR GUARD FOR TRAMWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 705,814, dated July 29, 1902.

Application filed March 19, 1902. Serial No. 98,895. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BAUER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fenders or Guards for Tramway-Cars, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved fender or guard for tramway-cars which is adapted to be suspended beneath the platform thereof and operate when in use to prevent a person or object from passing beneath the car when struck thereby; and with this and other objects in view the invention consists in a guard or fender for tramway-cars constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same reference characters in each of the views, and in which—

Figure 1 is a side view of one end of a tramway-car provided with my improvement and showing the tracks on which the same is placed; and Fig. 2, a plan view showing the platform of the car removed, the fender or guard being in operative position, but without the supports thereof.

In the drawings forming part of this specification I have shown at $a$ one end of a tramway-car, and at $b$ the tracks or ways on which said car is adapted to move, and in Fig. 2 I have also shown at $c$ the central slot of a cable road or underground-trolley road, said slot being formed by the usual side rails $c^2$.

The car $a$ is provided with the usual platform $d$, and in the practice of my invention I provide a fender or guard which comprises two side portions $e$, which are connected with and suspended beneath the platform $d$, this connection being made in any desired manner, and said side portions $e$ of the fender or guard are rigid and extend downwardly to a predetermined distance, as shown at $f$, above the ground or above the rails of the track or way $b$. The said side portions $e$ of the fender or guard also are arranged in V shape or triangular position, the apex thereof being directed forwardly, and said side portions of the fender or guard are preferably composed of front end pieces $e^2$, rear end pieces $e^3$, top and bottom bars $e^4$, and longitudinal central bars $e^5$; but the body portion of these parts of the fender or guard may be constructed in any desired manner.

Placed centrally between the forward ends of the side members $e$ of the fender or guard is a supplemental member $g$, which is hinged to a hanger $g^2$ at $g^3$, said hanger being secured to the central bottom portion of the platform $d$ of the car, and the bottom portion of the supplemental member $g$ is carried forwardly to form a projection $g^4$, in the bottom of which is supported a wheel or roller $g^5$, which travels on the side bars $c^2$, that form the central slot $c$ in the center of the track or way over which the car passes.

At the rear end of each of the side members $e$ of the fender or guard are other supplemental members $h$, which are hinged at $h^2$ to hangers $h^3$, secured to the bottom of the car at the opposite side thereof, and the supplemental members $h$ of the fender or guard are extended forwardly at their lower ends, as shown at $h^4$, and are provided with a wheel or roller $h^5$, said wheels or rollers $h^5$ being adapted to travel on the rails $b$ of the track or way, and the forward ends of the supplemental members $h$ of the fender or guard are provided with chains $i$ or other flexible devices, which are connected with the platform of a car at $i^2$ in any desired manner, and by means of these devices the forward ends of the supplemental members $h$ of the fender or guard may be raised into the position shown in dotted lines in Fig. 1 when they are not in use. The supplemental members $h$ are also held in operative position by the chain $i$, and these members of the fender or guard move directly in front of the wheels of the car and prevent a person or object from coming in contact with said wheels, and the fender or guard as thus constructed will prevent a person or object from passing beneath the car, said person or object being thrown off to the side of the platform, as will be readily understood. My improved fender or car is also entirely under the platform and out of the way, and it may, as will be apparent, be

applied to any kind or class of tramway-cars now in use.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A fender or guard for tramway-cars comprising main side members supported beneath the platform of a car in a V shape or triangular position, the apex thereof being directed forwardly, a supplemental member hinged beneath the platform of the car in the apex of the main side members and provided at its lower end with a wheel or roller, and other supplemental members hinged beneath the platform of the car at the rear end thereof and at the rear ends of the side members and provided with wheels or rollers adapted to travel on the rails of the track, substantially as shown and described.

2. A fender or guard for tramway-cars comprising side members supported beneath the platform of a car in a V shape or triangular position, the apex thereof being directed forwardly, a supplemental member hinged to the platform of the car, at the rear end thereof and at the rear ends of the side members and provided with wheels or rollers adapted to travel on the rails of the track, said last-named supplemental members being provided with means for raising them and holding them in a lifted position, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 18th day of March, 1902.

JOHN BAUER.

Witnesses:
F. A. STEWART,
F. F. TELLER.