

No. 847,289.

PATENTED MAR. 12, 1907.

H. H. MILLER.
SIGNAL DEVICE FOR STREET CARS.

APPLICATION FILED JULY 30, 1906.

Fig. 2.

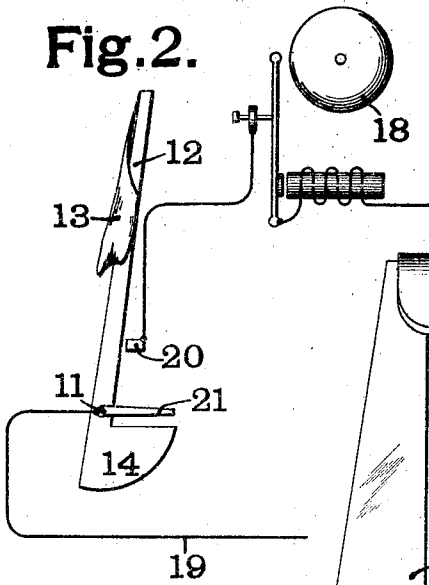


Fig. 1.

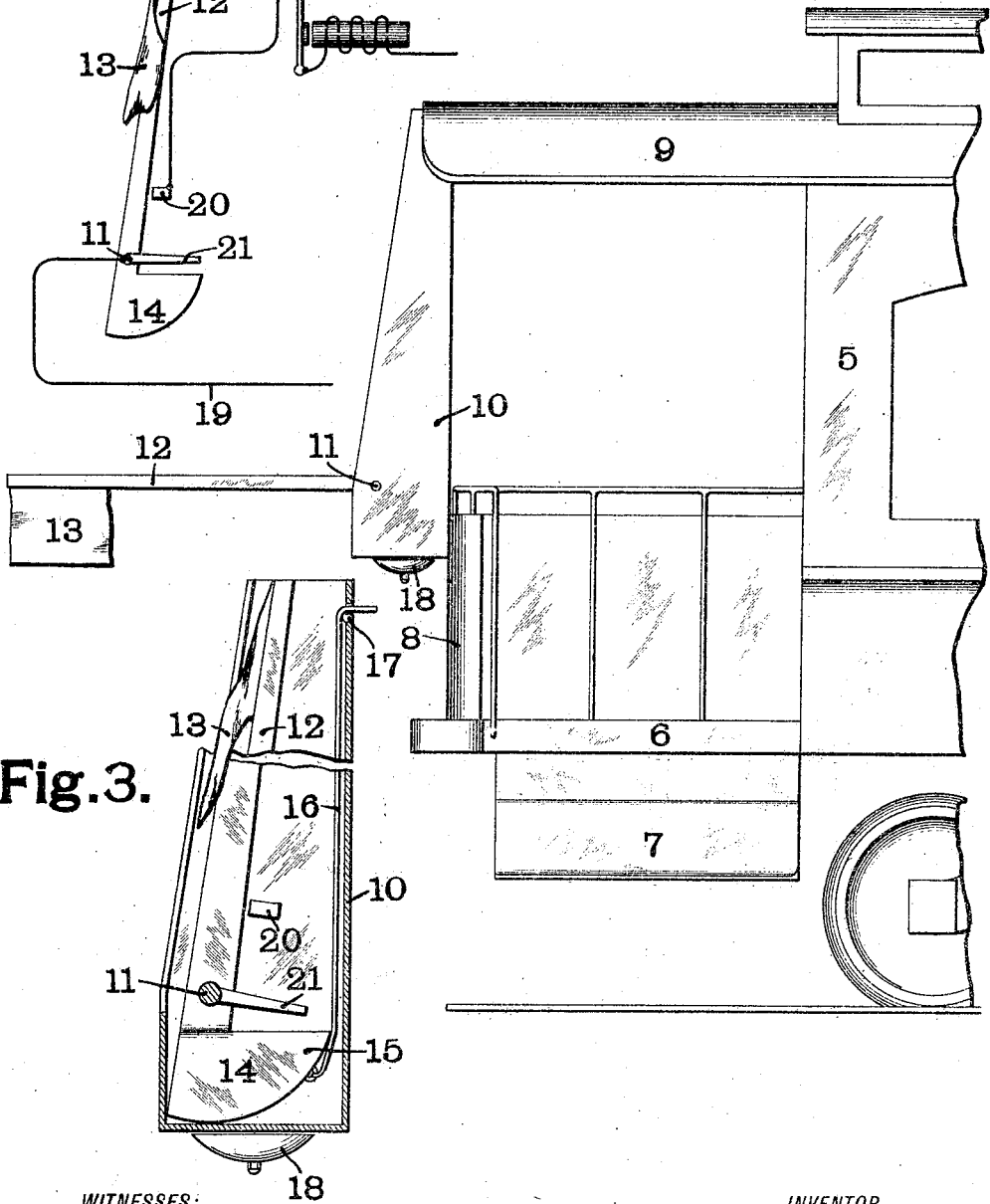
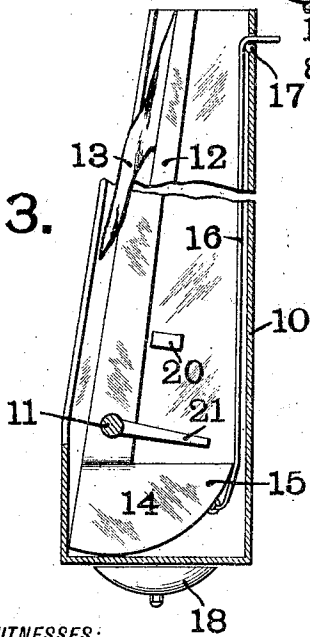


Fig. 3.



WITNESSES:

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HARRY H. MILLER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF THREE-EIGHTHS
TO GEORGE H. WATSON AND ONE-FOURTH TO J. F. MADDEN, OF ST.
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SIGNAL DEVICE FOR STREET-CARS.

No. 847,289.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed July 30, 1906. Serial No. 323,350.

To all whom it may concern:

Be it known that I, HARRY H. MILLER, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Signal Device for Street-Cars, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Accidents often occur owing to a passenger when alighting from a street-car immediately passing at the rear of the car to the adjacent track and being struck by the car approaching from the opposite direction, such approaching car being obscured from the passenger's vision by the car from which he has just descended.

The object of my invention is to provide means whereby the passenger may be warned of the approach of the car from the opposite direction on the adjacent track.

In carrying out my invention I provide at the rear end of the car a barrier, which is normally out of operative position, but which is within control of the motoneer, so that said barrier may be thrown into position to block the path at the rear of the car to the adjacent track, said barrier being preferably provided both with visual and audible danger-signals.

In the accompanying drawings which illustrate one form of signal device made in accordance with my invention, Figure 1 is a side view of the signal device, together with a portion of a street-car to which the same is attached. Fig. 2 is a diagram illustrating the bell-circuit, and Fig. 3 is an enlarged section through the signal device.

Like marks of reference refer to similar parts in the several views of the drawings.

5 is the body of the street-car; 6, the rear platform; 7, the steps leading to the platform; 8, the dashboard, and 9 the platform-hood.

10 is the casing of my signal device. This casing 10 is open at its rear edge and is preferably slightly tapered, as shown in the drawings. The casing 10 extends from the upper part of the dashboard 8 to the under face of the platform-hood 9 and is preferably arranged at the inner side of the car—that is, at the side toward the adjacent track. Piv-

oted in the casing 10 at 11 is an arm 12, which forms the barrier for obstructing the path to the adjacent track. This arm 12 carries at its extremity a flag 13, which forms a visual danger-signal. The lower end of the arm 12 is provided with a weight 14, which normally holds the arm 12 retracted within the casing 10 in a substantially vertical position, as shown in Fig. 3. The weight 14 is extended rearwardly, as shown at 15 in Fig. 3, and this extension 15 has attached to it a cord 16, which passes up through the casing 10 and over a pulley 17, situated near the upper end of said casing. After passing over the pulley 17 cord 16 extends under the platform-hood 9 and the roof of the car to the front platform and terminates within the reach of the motoneer. 18 is a bell, which is adapted to form an audible danger-signal. This bell 18 is contained in the circuit 19, which is preferably a branch of the usual bell-circuit provided in the car to enable the passengers to signal for the car to stop. One terminal of the circuit 19 is secured to a contact-plate 20, arranged within the casing 10, and the other terminal is secured to the pivot 11 of the arm 12. This pivot 11 also carries a small contact-arm 21, adapted to engage with contact-plate 20 when the arm 12 is lowered to horizontal position, and so complete circuit 19 to ring bell 18, the said circuit being broken when the arm 12 is in its normal position.

The operation of my device is obvious. When the motoneer stops the car to allow passengers to alight, if another car is approaching from the opposite direction, he operates the cord 16, thus causing the arm 12 to be thrown out of the casing 10 into a horizontal position, as shown in Fig. 1, thus forming a barrier across the path at the rear of the car. At the same time the circuit 19 is completed, so as to ring the bell to give an audible signal, and the flag 13 forms a visual signal to warn the passenger of the approaching car. When the cord 16 is released, the arm 12 is returned to its normal position in the casing 10 by means of the weight 14.

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

1. The combination with a car, of a movable visual signal located at the rear end

thereof, operating connections for actuating said signal, and an audible signal controlled by said connections.

5 2. The combination with a car, of a pivoted arm normally in vertical position at the rear end thereof, operating connections for moving said arm into position to block the path to the adjacent track, and an audible signal controlled by said connections.

10 3. The combination with a car, of a vertical casing situated at the rear end thereof, a pivoted arm normally contained in said casing, a signal-flag carried by said arm, and operating connections for moving said arm
15 into position to block the path to the adjacent track.

4. The combination with a car, of a vertical casing situated at the rear end thereof, a pivoted arm normally contained in said casing, a signal-flag carried by said arm, operating connections for moving said arm into position to block the path to the adjacent track, and an audible signal controlled by said connections. 20

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses. 25

HARRY H. MILLER. [L. s.]

Witnesses:

W. A. ALEXANDER,
BENNETTE PIKE.