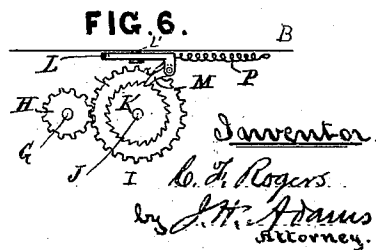
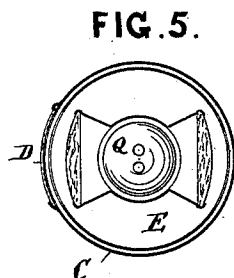
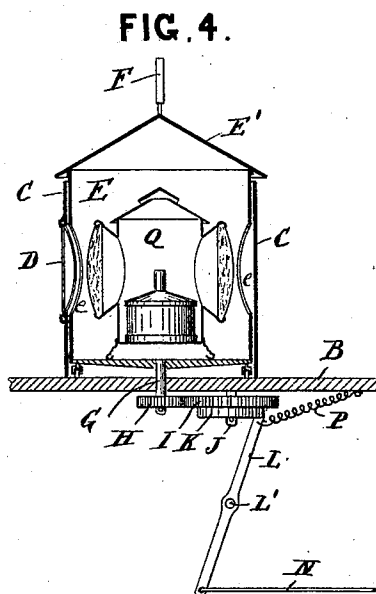
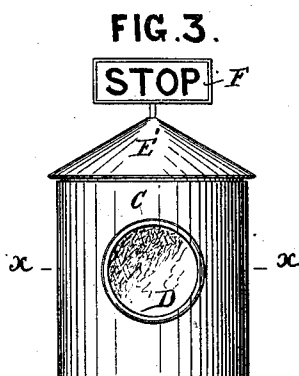
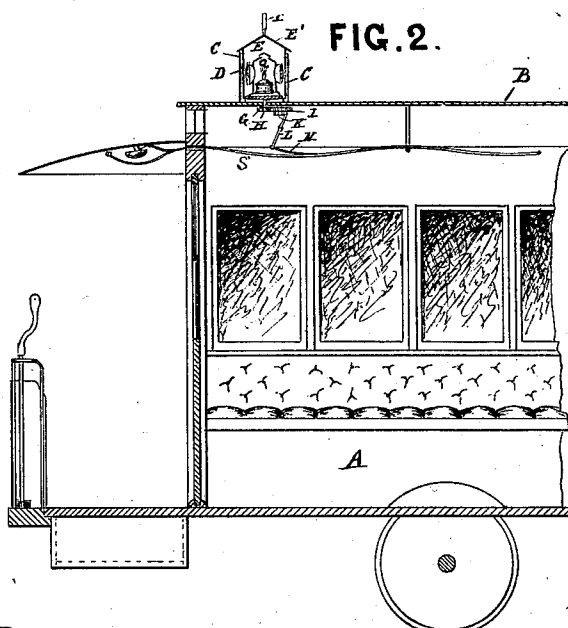
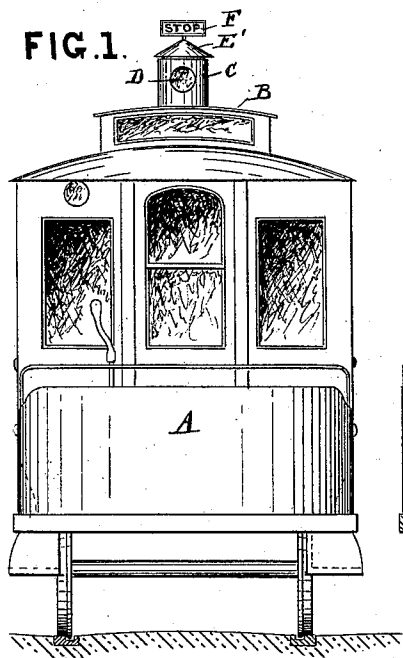


(No Model.)

C. F. ROGERS.
STREET CAR SIGNAL.

No. 358,484.

Patented Mar. 1, 1887.



Witnesses..

to Blanka
H. Carter

Inventor

II C. F. Rogers.
by J. H. Adams
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES F. ROGERS, OF BOSTON, ASSIGNOR TO ELIZA J. ROGERS, OF
CHELSEA, MASSACHUSETTS.

STREET-CAR SIGNAL.

SPECIFICATION forming part of Letters Patent No. 358,484, dated March 1, 1887.

Application filed October 26, 1885. Serial No. 180,910. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. ROGERS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Street-Car Signals, of which the following is a specification.

The object of my invention is to provide a means for guarding against accidents occurring to persons alighting from a street-car and stepping off in front of a car coming in the opposite direction.

The invention consists in the combination, with a street-car, of a rotatable signal on the roof thereof, the usual bell-strap, and intervening mechanism, substantially as hereinafter claimed, or the equivalent thereof, by which a pull on the bell-strap actuates the signal.

Referring to the accompanying drawings, Figure 1 is a front view of a street-car with my invention applied thereto. Fig. 2 is a partial longitudinal section of the same. Fig. 3 is a front view of a casing inclosing my invention. Fig. 4 is a vertical section of the same. Fig. 5 is a horizontal section taken on line *xx* of Fig. 3. Fig. 6 represents a means employed for actuating the signal.

A represents the body of a street-car.

B is the upper part of the roof.

C is a casing secured to the roof and provided with an aperture, D, in front, to be covered with glass to exclude dust, water, &c. Within the casing C is a casing, E, having holes *e* in its opposite sides, to be opposite the glass in aperture D when properly turned. This casing E is arranged to revolve, and is provided with a top or cover, E', to the upper part of which is secured a sign, F, having the word "Stop" on both sides. To the bottom of the casing E is secured a spindle, G, that passes down through the roof B, and is provided on its lower end with a cog-wheel, H, that gears with a cog-wheel, I, carried on a pin or stud, J. To the cog-wheel I is secured a ratchet-wheel, K.

L is a lever fulcrumed to the inner side of the car at L', and is provided on its upper end with a pawl, M, that engages with the ratchet-wheel K when the cord or strap N is pulled

for the display of the signal F. A spring, P, attached to the lever and to the car, serves to draw the lever back to its normal position.

Within the inner casing, E, is placed a lamp or lantern, Q, provided with "bull's-eyes," so that the signal can be used at night. The glass or bull's-eyes may be of some peculiar color, to indicate that the approaching car is to stop; or the word "Stop" may be marked on the glass.

When the signal for the approaching car is not required, it is turned so as to extend lengthwise of the car. When the signal for the approaching car is required to be displayed, the cord or strap N is pulled, causing the upper part of the lever L to actuate the pawl M (see Fig. 6) and the ratchet-wheel K, thus causing the cog-wheel I to turn part of a revolution and carry the wheel H and with it the casing E, so as to bring a bull's-eye opposite the opening D and also display the sign F. The cord N is shown connected with the bell-strap S, so that when the conductor pulls the strap to stop the car the signal will be operated at the same time.

When the signal to start the car is given, the pawl M, which has been drawn back by the spring P, will again engage the ratchet-wheel K and turn the latter and signal F another part of a revolution, so that the signal will be no longer shown at the front of the car.

Instead of two cog-wheels, only one may be used, the lever L being arranged to operate directly on a wheel on the spindle G.

What I claim as my invention is—

The combination, with the bell-strap of a street-car, of a lever connected thereto, a ratchet-wheel actuated by a pawl on said lever, and a rotatable signal above the roof of the car, connected with the ratchet-wheel, so that the pulling of the bell-strap shall actuate the signal, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

C. F. ROGERS.

Witnesses:

J. H. ADAMS,
E. PLANTA.