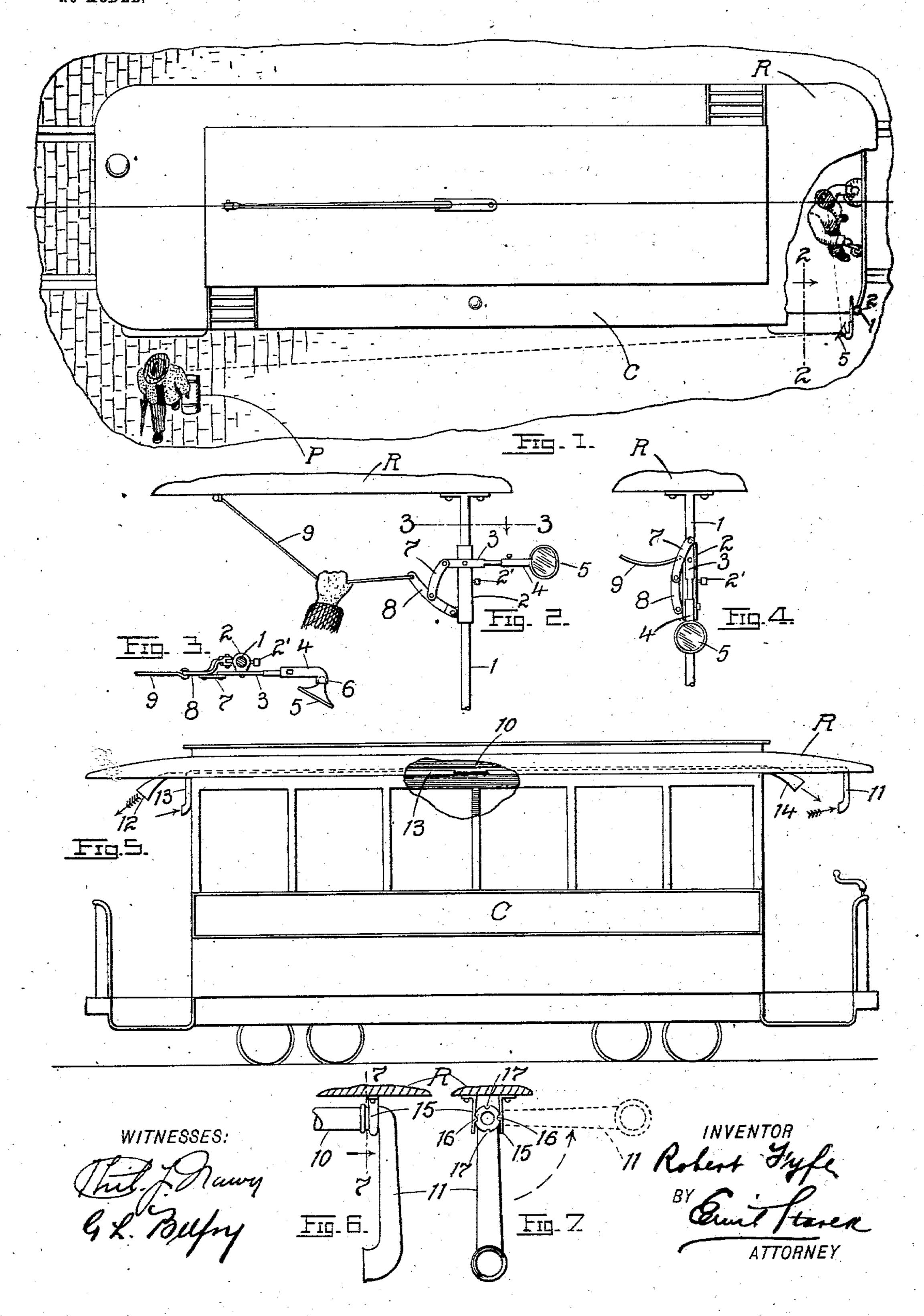
R. FYFE.

REFLECTOR.

APPLICATION FILED MAR. 25, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

ROBERT FYFE, OF ST. LOUIS, MISSOURI.

REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 730,361, dated June 9, 1903.

Application filed March 25, 1903. Serial No. 149,505. (No model.)

To all whom it may concern:

Be it known that I, Robert Fyfe, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Reflectors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in reflectors; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan of a street-car, showing my reflector applied thereto. Fig. 2 is a side elevation of the device unfolded for use. Fig. 3 is a horizontal section on line 33 of Fig. 2. Fig. 4 is a side elevation of the device when not in use. Fig. 5 is a side elevation of a car, showing an adjunct in the shape of a speaking-tube to be resorted to by the motorman. Fig. 6 is a detached view of the swinging end of the tube in side elevation, and Fig. 7 is a front elevation thereof.

a reflector specially applicable to street-cars and similar vehicles which will enable the motorman to see by reflection when a passenger has safely boarded the rear platform of a car or stepped off the car, so as to avoid accidents resulting from starting the car at improper moments.

In detail the invention may be described

as follows: Referring to the drawings, C represents a car. As now generally constructed the floor of the platform is connected to the roof R thereof by side posts 1. To the post 1 my invention is applied, the same consisting of a 40 sleeve 2, adjustable vertically along the post and secured thereto when once adjusted by a binding-screw 2'. Pivoted to the sleeve 2 is an arm 3, having a sliding extension 4, to the outer end of which is secured a reflector 45 5, said reflector being coupled to the extension by a ball-and-socket joint 6, so that it may be inclined to any necessary angle. The supporting-frame of the reflector is conical, so that the resistance offered thereby to the 50 atmosphere when the car is in motion may be reduced to a minimum. The inner end of the

7, whose opposite end is pivoted to the medial portion of a lever 8, whose base is pivoted to the sleeve 2 and whose free end is connected 55 to one end of a rope or chain 9, having its opposite end fastened to the roof R. The weight of the reflector and arm 3 is sufficient to normally fold the parts to the position shown in Fig. 4. Should the motorman de- 60 sire to ascertain the condition of things on the rear platform, he draws on the rope 9, Fig. 2, thus swinging the reflector outwardly. The rays of light coming from any object or person P will be reflected, and he can ascer- 65 tain without leaving his post whether a passenger has boarded the car or stepped off therefrom, and should a signal be given him at an improper time to go ahead he can take the precaution not to start the car until the 70 safety of the passenger is insured.

Should the car be packed and the motorman's line of vision be for any reason obstructed, he can inquire as to the condition of things on the rear platform through a speak-75 ing-tube 10, whose forward end is provided with a swinging mouthpiece 11 and the rear end with a flaring sound-distributer 12, the response being communicated to him through a return-tube 13, having a flaring distributer 80 14. When occasion to use the mouthpiece 11 does not arise, it can be swung up out of the way, (see dotted position, Fig. 7,) the said mouthpiece being suspended from the resilientarms or springs 15, having lugs 16, adapted 85 to enter corresponding recesses 17 in the upper deflected end of the mouthpiece, the grip of said arms being sufficient to hold the mouthpiece when swung to the position referred to.

By making the arm 3 extensible it is apparent that the reflector may be adjusted to cars of any dimensions.

I do not of course wish to be limited to the pressure of details here shown, as these may 95 be departed from without in any wise affecting the nature or spirit of my invention.

Having described my invention, what I claim is—

supporting-frame of the reflector is conical, so that the resistance offered thereby to the atmosphere when the car is in motion may be reduced to a minimum. The inner end of the arm 3 is pivotally coupled to one end of a link.

tween the adjacent inner end of the arm and an intermediate portion of the lever, a reflector at the outer end of the arm, and means for oscillating the lever, the parts operating sub-5 stantially, as and for the purpose set forth.

2. As an article of manufacture, a reflector comprising a suitable sleeve, an arm pivoted to the sleeve, an extension for said arm, a reflector having a conical frame or holder loto cated at the outer end of said arm, a ball-andsocket joint connecting the frame or holder

to the arm, a lever pivoted to the sleeve and a link pivoted respectively to the inner end of the arm and to an intermediate point along the lever, the parts operating substantially 15 as, and for the purpose set forth.

In testimony whereof I affix my signature

in presence of two witnesses.

ROBERT FYFE.

Witnesses:

EMIL STAREK, G. L. Belfry.