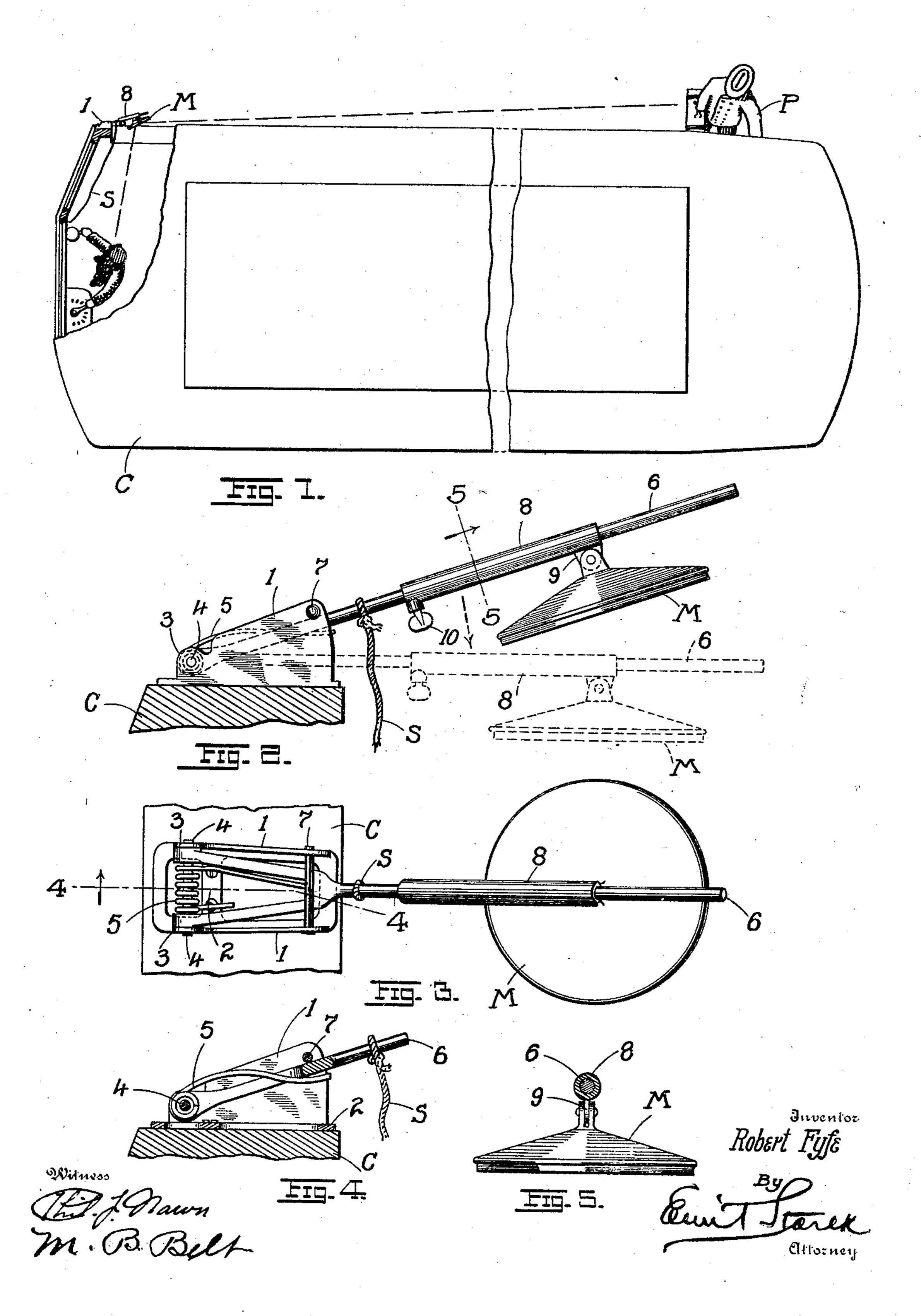
R. FYFE.
REFLECTOR.
APPLICATION FILED NOV. 18, 1904.



UNITED STATES PATENT OFFICE.

ROBERT FYFE, OF ST. LOUIS, MISSOURI.

REFLECTOR.

No. 795,602.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed November 18, 1904. Serial No. 233,378.

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 invention applied thereto. Fig. 2 is a top plan of the reflector attached to a car. Fig. 3 is an elevation thereof or as viewed against the side of the car. Fig. 4 is a horizontal section on line 4.4 of Fig. 3, and Fig. 5 is a cross-section on line 5 5 of Fig. 2.

The present invention is a qualification of the construction of reflector shown and described in United States Letters Patent issued to me under date of June 9, 1903, numbered 730,361, and while contemplating and having for its object the same purposes as the patented device the present construction is more specially adapted for vestibule-cars—that is, cars in which the front platform is entirely inclosed by glass panels which protect the motorman from the elements.

In detail the invention may be described as follows:

Referring to the drawings, C represents a vestibule-car, the front platform being inclosed by glass panels—a construction well understood and to which I make no claim. Secured to the side of the vestibule, adjacent the front thereof, is a bracket formed of substantially triangular top and bottom wings 1 1 and a suitable base 2, the latter being secured by screws directly to the car. Mounted between the lobes or lugs 3 3, formed at the forward vertices of the wings, is a hinge-pin 4, about which is wrapped a resilient coiled spring 5, one end of the spring bearing against the base 2 and the opposite end bearing against the base of the forked end of an oscillating arm 6, looped about the hinge-pin 4 on either side of the coil portion of the spring, the spring under the circumstances tending to oscillate the arm outwardly, in which outward oscillation, however, it is limited by a pin 7, disposed between the rear outer vertices of the wings. The arm 6 extends a suitable distance

rearwardly beyond the bracket and carries a reflector or mirror M, the back of which is provided with a sleeve 8, longitudinally and rotatably adjustable on the said arm. The rear end of the sleeve is, moreover, provided with an ear or lug 9, to which the mirror is directly pivoted, thereby providing for an angular adjustment of the mirror in a plane passing through the axis of rotation of the sleeve, thus making the adjustment of the mirror practically universal—that is to say, making it adjustable in all directions. The sleeve when adjusted to the proper distance from the axis of oscillation of the arm 6 is secured in place by the binding-screw 10. The rays of light coming from any object or person P will be reflected, and the motorman can ascertain without leaving his post whether a passenger has boarded the car or stepped off safely therefrom, all as fully set forth in the patent referred to.

The object of the spring 5 is twofold. In the first place it forces the arm 6 outwardly to the proper inclined position to enable the reflector to receive the light-rays coming from any object in the rear, and in the second place in the event of the arm 6 colliding with a vehicle in the street coming in opposite direction to the car the spring will permit the arm to yield inwardly (see dotted position thereof in Fig. 2) and escape any serious damage, or should the car be standing still and a vehicle come in the same direction and liable to strike against the free end of the arm the motorman can draw the arm inward by pulling on a cord S, attached to the arm, so that in either case the danger of damage to the arm is avoided.

I may of course depart from the details herein shown without affecting either the nature or spirit of my invention.

Having described my invention, what I

claim is—

1. In combination with a car, a bracket secured thereto, a spring-controlled oscillating arm pivoted to the bracket and projecting rearwardly at a suitable inclination to the car, means on the bracket for limiting the outward oscillation of the arm, and a reflector carried thereby, substantially as set forth.

2. In combination with a car, a spring-controlled oscillating arm carried by the side of the car, and swinging about a fixed pivot and projecting rearwardly at an inclination to such side, and a mirror mounted on the arm, substantially as set forth.

3. As an article of manufacture, a reflector

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comprising a bracket, an arm hinged at one end within the bracket, a spring for normally swinging the arm to one side of the bracket, means carried by the bracket for limiting the arm in such lateral swing, and a reflector carried by the arm, substantially as set forth.

4. As an article of manufacture, a reflector comprising a bracket having a base and top and bottom wings, a hinge-pin mounted between the wings at the front of the bracket and adjacent to the base thereof, a forked arm looped about the pin, a spring coiled about the pin between the arms of the fork and hav-

ing one end bearing against the base and the opposite against the arm, a pin mounted at the rear of the bracket between the wings and at a point removed from the base, and a reflector mounted on the arm, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT FYFE.

Witnesses:

EMIL STAREK, M. B. Belt.