No. 619,965. Patented Feb. 21, 1899.

J. A. LAKIN.

ROUTE INDICATING LAMP FOR STREET CARS.

(Application filed Apr. 19, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

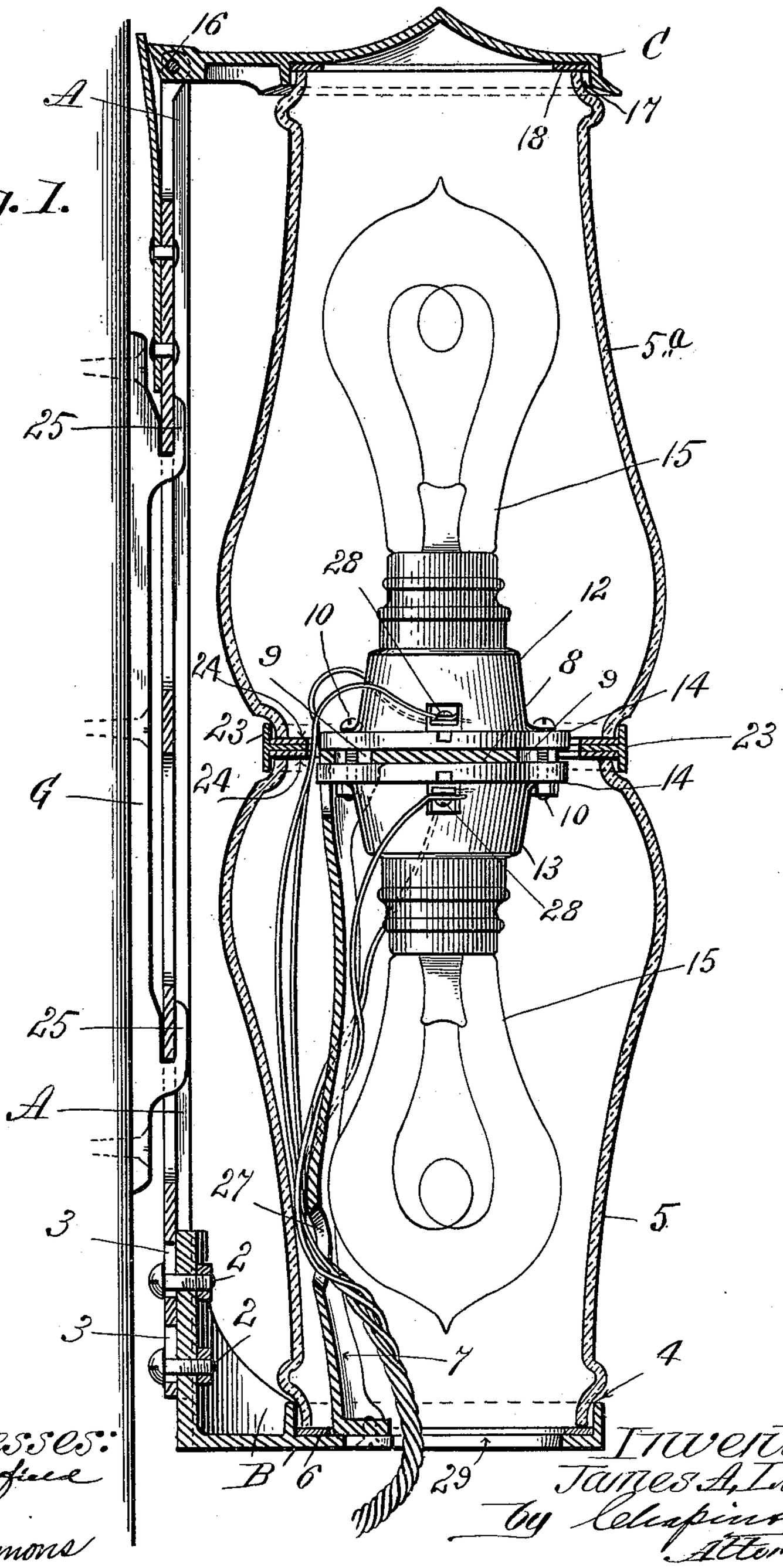

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Fig. 2.

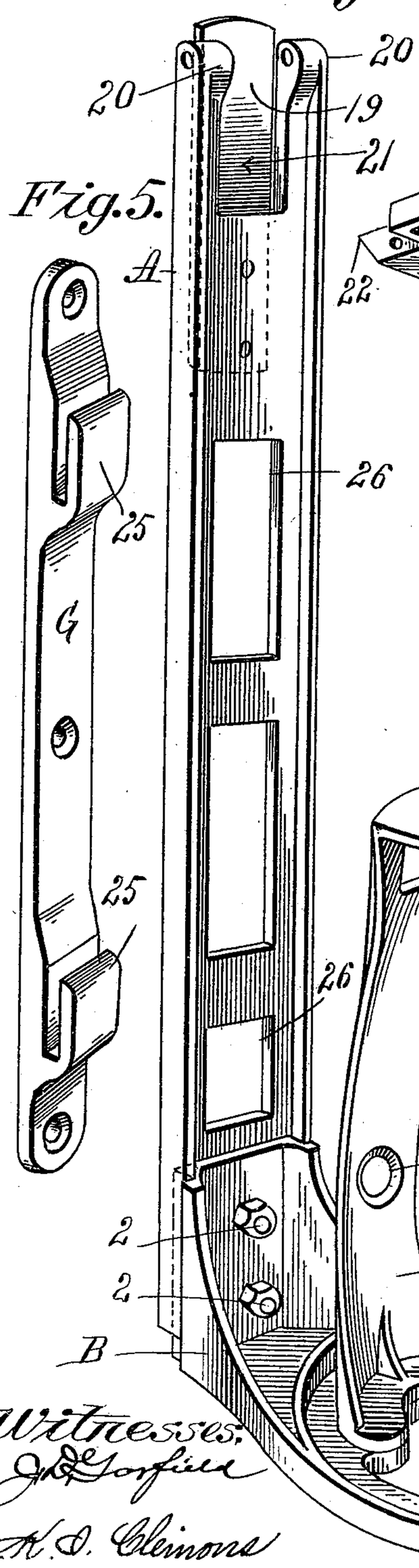


Fig. 3.

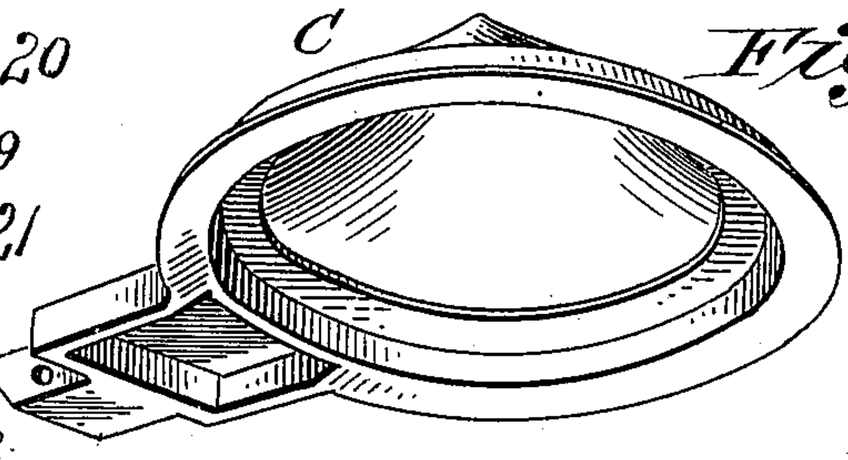
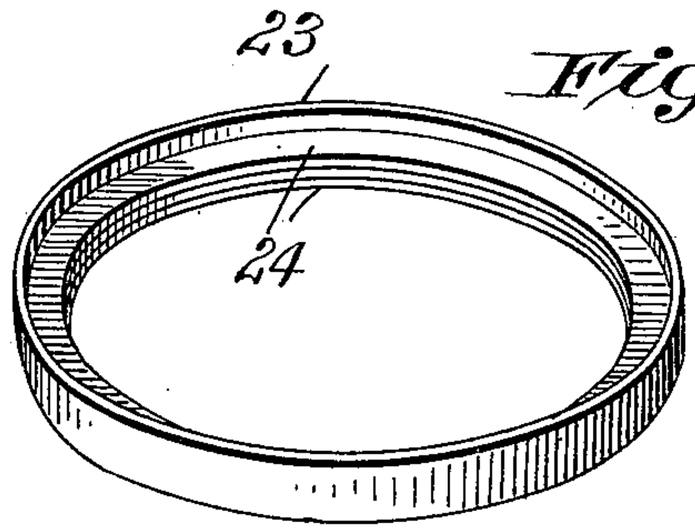


Fig. 4.



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UNITED STATES PATENT OFFICE.

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ROUTE-INDICATING LAMP FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 619,965, dated February 21, 1899.

Application filed April 19, 1898. Serial No. 678,172. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. LAKIN, a citizen of the United States of America, residing at Westfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Route-Indicating Lamps for Street-Cars, of which the following is a specification.

This invention relates to route-indicating lamps such as are used to designate the routes followed by different cars of a street-railway; and the object thereof is to produce a cheap and convenient construction for attachment to the cars and adapted to receive incandescent electric lamps and varicolored inclosing globes therefor which are readily changeable; and the invention consists in the construction hereinafter described, and clearly pointed out in the claims.

In the drawings forming part of this specification, Figure 1 represents a vertical section of a lamp of the character above described. Fig. 2 is a perspective view of a lamp and globe supporting frame. Fig. 3 is a perspective view of a hinged cap for the upper end of said frame. Fig. 4 is a view of a ring for receiving incandescent-lamp sockets. Fig. 5 is a view of a plate on which said frame shown in Fig. 2 is supported.

Referring to the drawings, A represents a frame-plate, to which the globe-supporting base B is adjustably secured. Any convenient means may be employed for securing said base to the lower end of said plate. In the drawings it is shown as being secured by bolts 2, passing through said plate and an upturned portion of said base, and said plate is slotted longitudinally, as at 3, where said bolts pass through it and said base, and whereby said base may be secured in any desired position on said plate within the limit of movement permitted by said slots. Said globe-supporting base B is circular in shape and is provided with an annular depression 4 for the reception of one end of a glass globe 5, within which depression is placed a ring 6, of rubber or other suitable material, which will form a suitable cushion for one end of said globe and prevent the breaking thereof by the jarring of the car. Within said annular depression 4 and located far enough from its periphery to permit the globe 5 to be placed therein, as described, is the vertical lamp-supporting arm 7, which is secured to the base B by screws or in any other suitable manner. The upper end 8 of said lamp-supporting arm lies at right angles thereto and is provided with the perforations 9, through which the screws 10 pass, by which the two lamp-sockets 12 and 13 are secured to the said upper end 8 of the lamp-supporting arm 7. One of said sockets is placed on top of the upper end 8 of said arm 7 and the other is placed on the under side thereof in such position that the holes in the ears 14 of the sockets coincide with the said perforations 9 through said part 8. In this way the sockets are accurately secured one over the other. These lamp-sockets are of the type known as "wall-sockets," and the lamps 15 are placed in them in the usual manner. Any convenient means for supporting said lamps may be used, however, which will hold them in substantially the position shown in the drawings in Fig. 1.

A cap C (see Fig. 3) is hinged at 16 in the upper end of the frame and is provided with an annular depression 17, similar to that shown in the globe-supporting base B, and into said depression the upper end of a glass globe 5^a enters, a cushioning-ring 18 being inserted in said depression 17 to prevent injury to the said globe.

The upper end of the frame-plate A is cut away, as at 19, leaving two upstanding arms 20 20, between which said cap C is hinged, and a flat spring 21 is riveted or otherwise secured to the said frame-plate, the upper end of which spring bears on a part 22 of said cap-hinge, which projects beyond the rear surface of said frame-plate A, and when said cap C is in the position shown in Fig. 1 forces said spring outward, and the pressure of said spring on the part 22, which is above the pivotal point of said hinge, tends to always hold said cap down on the upper end of the globe 5^a with a yielding force, thus clamping said globes 5 and 5^a, placed end to end, as shown, between said fixed base and said spring-held cap.

Between the upper and lower globes 5 and 5^a is a metal ring 23. (Illustrated in Fig. 4.) Said ring is provided with an inwardly-projecting flange on its inner surface located midway between its edges. On both sides of

said flange are placed rings 24, of rubber or similar cushioning material, thus forming a cushioned globe-parting ring separating the adjoining ends of the globes and protecting them against breakage from jolting motions of a car.

The borders of the above-mentioned lamp-sockets, as shown in Fig. 1, are held near the inner border of the said inwardly-projecting flange on the said ring 23, and by providing cushion-rings 24 of about the diameter of said lamp-sockets the latter and said rings held by the said arm 7 provide a cushioned support for the adjoining ends of said globes against undue lateral movement of said globe ends due to abrupt movements of a car.

By raising the cap C the globes 5 and 5ª may be easily removed and others substituted therefor, thus permitting the substitution of globes of one color for those of another if the car is to be shifted from one route to another.

Any suitable means for supporting said lamps and their supporting-frame in a proper position on the car may be employed. A convenient construction for this purpose for supporting said lamps in the usual position on the corner of a car is shown in Figs. 1 and 5, and it consists in a metal plate G, provided with the upstanding hooks 25. This plate is screwed to the car, and perforations 26 in the plate A are made, with the upper edges of which said hooks 25 engage, as shown in Fig. 1, to support the frame-plate A and its lamps.

To provide for the convenient placing of the wires for the lamps, a hole 27 is made in the lamp-supporting arm 7, through which said wires are led before being secured to the socket connections 28, and this prevents the wires from getting around in front of said lamps.

With the lamps wired up as shown both globes may be removed without making any disconnections of said wires, all of the latter being located within the globes and entering through the openings 29 in the base B.

The globes 5 and 5ª are made of any color or combination of colors necessary to designate the route to be followed by the car on which they are placed.

The frame-plate A, globe-supporting base B, and cap C and other parts of the device are preferably made of a suitable metal, as malleable iron or brass.

By means of the adjustable globe-supporting base B and the spring-held cap C the frame may be readily adapted to receive globes which vary more or less in length.

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

1. In a route-indicating lamp for street-cars, a frame-plate, a base secured to the lower end of said plate, a lamp-supporting arm secured on said base, a globe-cap attached to the upper end of said frame-plate, and means for removably holding said cap in a position substantially at right angles to said frame-plate, substantially as described.

2. In a route-indicating lamp for street-cars, a frame-plate, a base secured to the lower end of said frame-plate and adjustable thereon lengthwise of said plate, a globe-cap pivotally supported on the upper end of said plate, a lamp-supporting arm secured on said base, and a spring on said frame-plate engaging said globe-cap for holding it in a plane parallel with said plate, or in a position substantially at right angles thereto, substantially as described.

3. A route-indicating lamp for street-cars consisting of a frame-plate, a base secured to the lower end of said plate, a lamp-supporting arm secured to said base, means for supporting an incandescent electric lamp on said arm, lamp-inclosing globes supported on said base and removably held thereon by said globe-cap, and means for adjusting said base lengthwise of said frame-plate, substantially as described.

4. A route-indicating lamp for street-cars consisting of a frame-plate, a vertically-adjustable base secured to the lower end of said plate, an arm on said base, incandescent-electric-lamp sockets secured on said arm, a globe-cap pivotally secured to the top of said frame-plate, globes supported between said cap and said base, a spring on said frame-plate engaging said cap for holding it against said globes, and a cushioned globe-parting ring between the adjoining ends of said globes, substantially as described.

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