(No Model.)

W. F. BÜCHER.

INDICATOR FOR CARS.

No. 590,296. Patented Sept. 21, 1897.

Fig. 1.

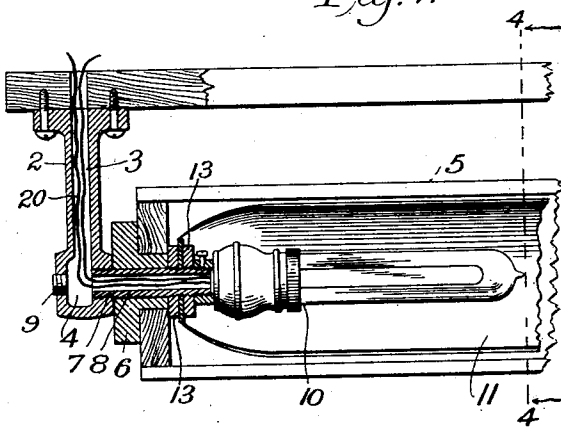


Fig. 2.

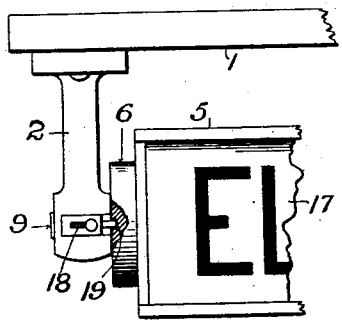


Fig. 3.

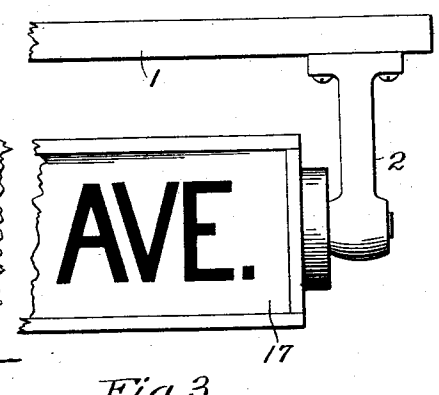


Fig. 4.

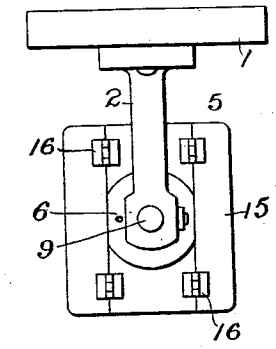
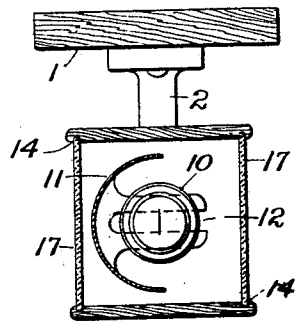


Fig. 4.



WITNESSES

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INDICATOR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 590,296, dated September 21, 1897.

Application filed October 10, 1896. Serial No. 608,464. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. BÜCHER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Indicators for Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to a novel construction in an indicator which is adapted more especially for use in connection with street-railway cars—for instance, an electric car—and is employed to give some notice or signal—for instance, the terminal station of the car.

The invention consists in the features of construction hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a vertical longitudinal section of the device attached to the roof of an electric car. Fig. 2 is a fragmentary side elevation of one end of the indicator. Fig. 3 is an end elevation. Fig. 4 is a vertical transverse section taken on the line 4 4 of Fig. 1.

Referring now to said drawings, 1 indicates a portion of the roof of a car, and 2 the depending hangers secured thereto and from which the indicator is suspended. These hangers 2 are provided with a central upright opening 3 and a transverse opening 4 in the lower end thereof, communicating with the upright opening or passage 3. A rotatable casing 5 is secured to the lower end portion of these hangers 2 and is preferably rectangular in cross-section. Said casing 5 is provided with end bearings 6, that receive the spindles 7. These spindles 7 are hollow and are provided at their outer end portions with screw-threads by means of which they are fastened in one end of the transverse openings 4 of the hanger. Inwardly of this screw-threaded portion the spindle is provided with a smooth journal portion 8, passing through the bearings in the end of the casing. Inwardly of this journal portion the said spindles are again screw-threaded. The outer end of the transverse opening 4 of the hanger is closed by means of a removable plug 9. It will be seen from the construction above described that the casing is held against end movement by the lower ends of the hangers and is capable of rotation upon the inwardly-projecting spindles upon these hangers, while the inner screw-threaded portion of these spindles is situated within the casing. To the inner ends of the spindles 7 and within the casing are secured the electric lamps 10, that extend longitudinally within the casing and in front of an upright reflector 11, rigidly secured at its ends to the said spindles. The said reflector is curved and serves not only to reflect and throw the rays of light to the front, but serves to prevent the rays of light as much as possible from reaching the rear side of the indicator. The ends of this reflector are bent forwardly and are provided with an open slot 12, that receives the inner screw-threaded end of the spindle, and is held rigidly in place thereon by two clamping-nuts 13. The said casing is preferably provided on two opposite sides with guide-grooves 14, that are closed at one end and open at the other. The open end of these grooves is closed by means of a hinged section 15, fitting closely upon the end of the casing and held in a closed position by spring-hinges 16. These guide-grooves 14 receive the sign-plates or side lights 17, which conveniently consist of opaque or ground glass, upon which a street-name or terminal station is printed or painted. One of the hangers 2 is provided with a sliding spring-catch 18, of any approved construction, that engages openings 19 in the end of the casing to hold said casing in the desired position. By sliding this catch away from the end of the casing this end is withdrawn from the opening 19 therein and the casing can be turned. The lamps 10 are provided with circuit-wires 20, that extend through the hollow spindle and then upwardly through the upright passage 3 of the hanger, as shown.

It will be noted, of course, that an indicator constructed in accordance with this invention can be used upon cars for indicating the terminal of a car, its route, or for any other purpose, and, for instance, to illustrate the employment of this invention its use in connection with an electric car will be described, wherein the electric car in going into the busi-

ness portion of a town will take one route while it returns by another or to another station. The casing will then be provided with two of these signs to indicate the two routes. By releasing the spring-catch 18 the casing can be turned to bring either of the signs to the front, which will be held in this position by said catch. The electric lamps within the casing give sufficient illumination to exhibit the front light or sign, while the reflector or hood in the rear of the lamps serves to prevent the rays of the same from illuminating the rear light or sign and also to shade the eyes of the motorman. When the car changes its route, the spring-catch is again released to allow the casing to be released and bring the other sign to the front. The signs can be readily changed by opening one of the sections 15, as will be obvious. The purpose of the transverse opening 4 and the removable plug 9 is that in stringing the wires and securing the electric-lamp socket it will not be practicable to string the wires through the angular passages and then turn the socket, and for this reason when stringing the wires and putting the socket in place the plug 9 is removed and the wires passed therethrough, so they can readily turn as the socket turns. After the socket has been secured in place the wires are then strung through the passage 3 in the manner shown and the plug 9 is inserted.

An indicator of this construction is inexpensive and durable and can be readily and easily operated, and in use either day or night serves to notify people of the car's destination or to give other information.

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

In an indicator, the combination with the hollow upright hangers provided at their lower ends with inwardly-extending hollow spindles, openings in said hollow hangers opposite the ends of said spindles, and removable plugs in said openings, of a rotatable casing that is rectangular in cross-section having two opposing sides provided with side lights, while the other opposing sides are closed, openings in the ends of said casing through which said hollow spindles pass, whereby said casing can rotate upon said spindles, electric lamps secured to the inner ends of the hollow spindles and having circuit-wires extending through the spindles and hangers, and a stationary reflector situated within said casing and in the rear of said lamps and provided with forwardly-extending end portions that are secured to said spindles between clamping-nuts thereon, and means for holding said casing rigid with relation to the hangers.

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

WILLIAM F. BÜCHER.

Witnesses:
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