F. G. WHITTINGTON.

ELECTRIC SOCKET DEVICE FOR VEHICLE LAMPS.

APPLICATION FILED JUNE 23, 1920.

1,411,947. **Patented Apr. 4, 1922.**

Fig. 1.

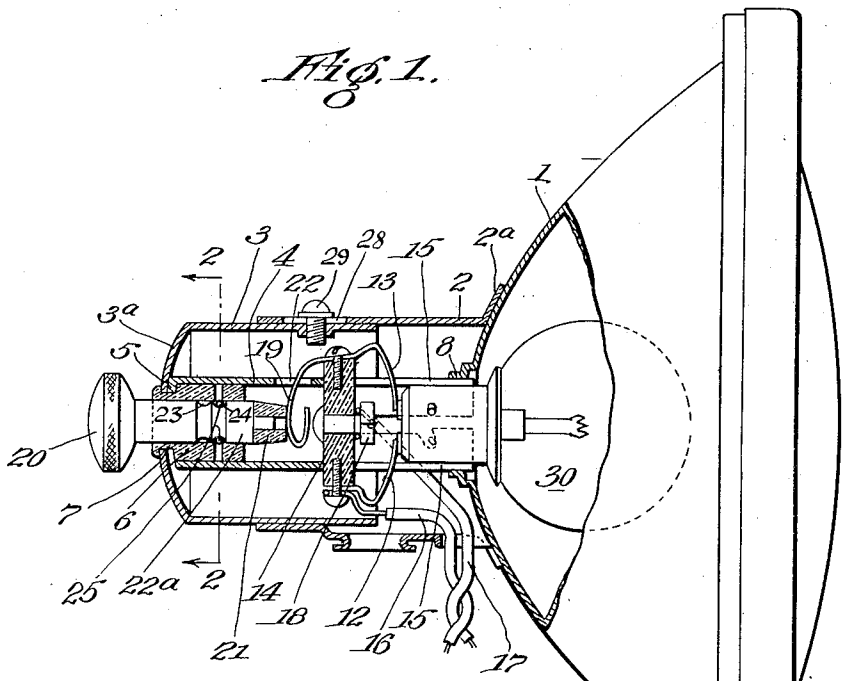


Fig. 3.

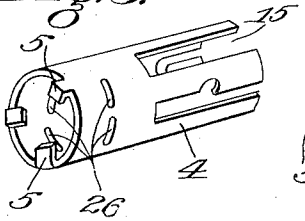


Fig. 4.

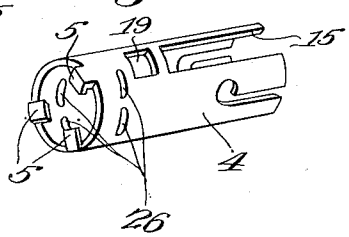
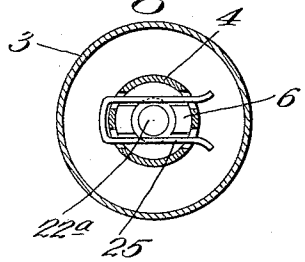


Fig. 2.



WITNESSES:

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FREDERIK G. WHITTINGTON, OF CHICAGO, ILLINOIS, ASSIGNOR TO STEWART-WARNER SPEEDOMETER CORP., OF CHICAGO, ILLINOIS, A CORPORATION OF VIRGINIA.

ELECTRIC SOCKET DEVICE FOR VEHICLE LAMPS.

1,411,947. Specification of Letters Patent. Patented Apr. 4, 1922.

Original application filed December 5, 1919, Serial No. 342,586. Divided and this application filed June 23, 1920. Serial No. 391,129.

To all whom it may concern:

Be it known that I, FREDERIK G. WHITTINGTON, a citizen of the United States, residing in the city of Chicago, in the county of Cook and the State of Illinois, have invented certain new and useful Improvements in Electric Socket Devices for Vehicle Lamps, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

This application is a division of my application, Serial No. 342,586, filed December 5, 1919. The specific invention to which this application relates is an improvement in electric socket devices for vehicle lamps. It consists in the elements and features of construction shown and described, as indicated in the claim.

In the drawings:

Figure 1 is a partly sectional plane view of a vehicle lamp equipped with this invention, section being made axially with respect to the reflector stem and lamp socket.

Figure 2 is a section taken at the line 2—2 of Figure 1.

Figure 3 is a perspective view of the lamp socket tube in one position.

Figure 4 is a similar view in a position turned 180 degrees about its axis from the position of Figure 3.

In the construction shown in the drawings, 1 is the focusing reflector of the lamp. It has a tubular stem, 2, which is provided with a telescopic end closure member, 3. Axially within this stem and closure there is positioned the tubular lamp socket, 4, which, with respect to its mounting and wiring connections and lamp engagement, will now be described.

The tubular stem 2, is secured to the rear side of the reflector, 1, by means of the flange, 2^a, and, as stated, the opposite end is closed by the cup-shaped member, 3, telescoping within said tubular stem, 2, and serving as a carrier for the lamp socket tube, 4. At its rear end, the latter is formed with three lugs, 5, bent to extend transversely inward and seat against the inner surface of the end wall, 3^a, of the closure member, 3, adjacent to central opening in said end. A filler or bushing, 6, is fitted within the end of the tube, 4, with its reduced portion, 7, projecting between the lugs, 5, and through the central opening in said end of the closure member, 3, and being clinched down upon the outer wall of said end to permanently unite the socket tube, 14, to said closure member, 3. The opposite end of socket tube, 4, is guided in a flange, 8, projecting from the base, 9, of the lamp bulb, 30. The lamp base is provided with contact areas at its rear end, and these are connected into the electric circuit through yielding contact members, 12 and 13, mounted on an insulating member, 14, which is lodged in a pair of diametrically opposite rectangular slots, 15, in the socket tube, 4, suitable connection with electric current being provided by lead wires, 16 and 17, one of which is connected directly in contact with the member, 12, while the other is secured under the nut of a bolt, 18, which is positioned centrally in the insulating member, 14, with its head at the rear side of said member, disposed for contact with a spring arm, 19, which is formed as an extension of the contact member, 13, and through which the circuit is completed to the lamp. A push button, 20, is slidably mounted in the bore of the bushing or filler, 6, with an insulating tip, 21, operatively engaging the spring contact arm, 19, clearance for movement of the latter being provided by an opening, 22, in the socket tube, 4. The stem, 22^a, of the button, 20, is formed with two parallel and closely adjacent grooves, 23 and 24, and a U-shaped member, 25, of spring wire accommodated in slots, 26, formed in the bushing, 6, and in clearance apertures, 27, provided in the tube, 4, as shown in Figure 2, engages one or the other of the grooves, 23 and 24, serving as a detent to hold the push button at one or the other of its limiting positions.

Adjustment of the filament of the incandescent lamp, 30, to the focal center of the reflector, 1, is effected by sliding the closure member, 3, of the tubular stem or neck, 2, longitudinally within said tubular stem, which moves the socket tube, 4, along the axis of said tube and of the tubular stem, 2, sliding it through the flange, 8, and carrying the lamp back and forth until the correct position is attained and obtained. The tubular neck, 2, is slotted as seen at 28, to accommodate a clamping screw, 29,

which is carried in the closure member, 3, and adapted to secure the parts firmly at adjusted positions.

I claim:

A holder for an electric lamp bulb comprising an outer shell, having one end open and a head at the other end centrally apertured; an inner tube forming the lamp socket joined to said head about said aperture; a contact-carrying block, said block and tube comprising means by which the block is slidably mounted in said socket member with its ends protruding therefrom at opposite sides thereof; spring contact pieces secured to said protruding ends of the block and extending forward and inward into the said socket member for contact with the lamp electrodes; a binding post carried by the block; means for securing the inleading current wires respectively to the binding post and against one of the contact pieces, the other contact piece being extended from its securement to the block rearward and terminating behind the binding post; means for engaging the lamp base in the forward end of said socket; a push button mounted in the rear end having an insulating terminal for encounter with the second mentioned contact piece for forcing it into contact with the binding post, and means for holding the push button at contact making and breaking positions.

In testimony whereof, I have hereunto set my hand at Chicago, Illinois, this 16 day of June, 1920.

FREDERIK G. WHITTINGTON.