Nov. 13, 1923. 1,474,015

R. B. BENJAMIN

LAMP SOCKET

Filed Dec. 12, 1919

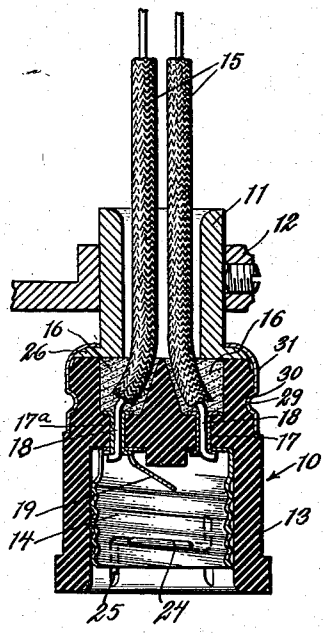


Fig. 1.

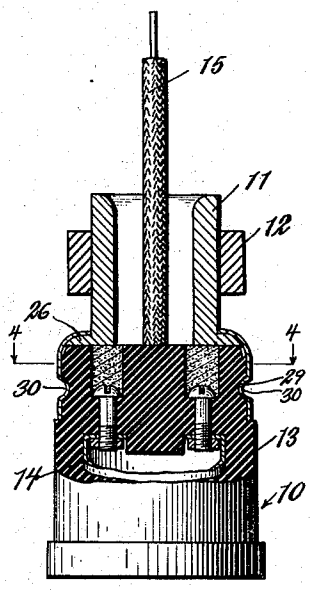


Fig. 3.

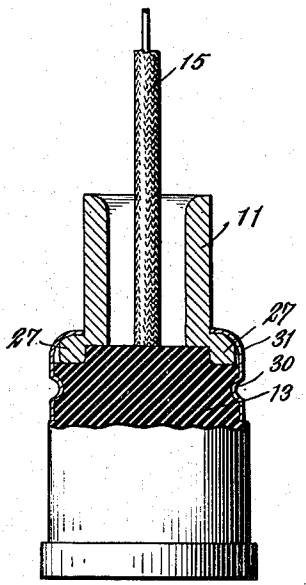


Fig. 5.

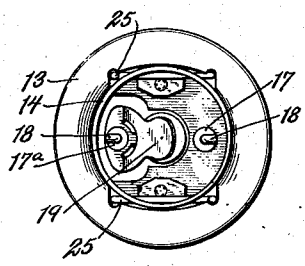


Fig. 2.

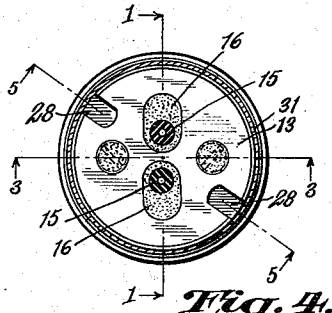


Fig. 4.

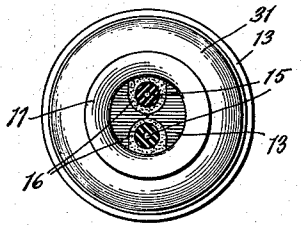


Fig. 6.

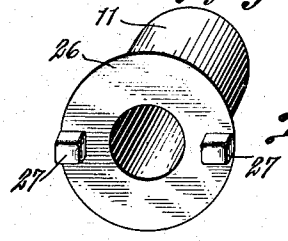


Fig. 7.

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UNITED STATES PATENT OFFICE

REUBEN B. BENJAMIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO BENJAMIN ELECTRIC MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

LAMP SOCKET.

Application filed December 12, 1919. Serial No. 344,302.

To all whom it may concern:

Be it known that I, REUBEN B. BENJAMIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Lamp Sockets, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to lamp sockets, and more specifically to lamp sockets for use in locomotive headlights and similar places.

It is desirable that the lamp socket in a locomotive headlight should be made adjustable so that the lamp can be brought to the desired position with respect to the reflector in order to give the best light distribution. These sockets are subject to considerable jar and vibration and have to be very firmly supported. It is also desirable that the adjustment should be simple and reliable.

One of the objects of my invention is to provide simple, durable reliable means for adjustably supporting the socket.

Further objects will appear from the detailed description to follow and from the appended claims.

In the drawings—

Fig. 1 is a vertical sectional view of a lamp socket and support on the line 1—1 of Fig. 4;

Fig. 2 is a bottom plan view of Fig. 1;

Fig. 3 is a partial sectional view on the line 3—3 of Fig. 4;

Fig. 4 is a partial sectional view on the line 4—4 of Fig. 3;

Fig. 5 is a partial sectional view on the line 5—5 of Fig. 4;

Fig. 6 is a plan view of Fig. 5; and

Fig. 7 is a perspective view of the tubular shank.

This invention is shown in connection with a lamp socket 10 having a tubular shank 11 adjustably supported in a suitable bracket 12. Supported by the tubular shank 11 is an insulating base 13 which may be of bakelite or other suitable insulating material which will stand the vibration and heat. The base 30 is recessed from its lower face in which is supported a threaded shell contact 14 for engagement with the contact base of a suitable lighting bulb. The tubular shank 11 is formed to provide a passage for the feed wires or conductors 15, which wires pass through said passage and are received by the recesses 16 in the insulating base 13.

Supported in the insulating base are the eyelets 17 and 17^a through which the bared ends 18 of the conductors pass. The eyelet 17^a is in engagement with and supports the center contact 19 while the eyelet 17 engages a flange portion of the shell contact to help support said shell contact. The bared ends of the conductors 18 are preferably soldered to the eyelets and supply the current to the shell and center contacts. An opening 24 is provided in the shell contact to receive a portion of the Z-shaped lamp grip member 25, the object of this member being to provide means to engage the lamp base to prevent unscrewing of said lamp caused by vibration thereof in the receptacle portion.

The shank 11 has a long tubular portion which is adjustably supported for longitudinal movement in the bracket 12 whereby the light may be focused as desired. This shank has a flange portion 26 at its lower end upon which are positioned a plurality of lugs 27 preferably diametrically arranged near the periphery of the bottom face of said flange.

The insulating base has in its upper face a plurality of slots 28 which are positioned to receive the lugs 27 which fit snugly into said slots and prevent rotation or vibration of the insulating base with respect to the tubular shank and bracket 12.

In order that the tubular shank 11 and the insulating base 13 will snugly engage each other to prevent relative movement and vibration of each with respect to the other, the insulating base is provided with an annular groove 29 into which a corresponding groove portion 30 of cap 31 is beaded. The cap then extends upwardly and has an inwardly extending flange which engages the flange 26 of the tubular shank whereby the lugs 27 are held in engagement with the slots 28 in the insulating base and prevent vibration and relative movement of the tubular shank and insulating base with respect to each other.

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

1. A lamp socket construction comprising an insulating base, shell and center contacts supported thereby, wiring terminals for said contacts supported by said insulating base,

a tubular shank for insertion in a supporting bracket secured to said insulating base through which the conductors pass to said wiring terminals, said shank having an outwardly extending flange at its junction with the insulating base, interengaging means on said tubular shank and insulating base for preventing relative rotation therebetween, and a sheet metal ring secured to said insulating base and flanged over said outwardly extending flange for securing said parts together.

2. A lamp socket construction comprising an insulating base, shell and center contacts supported thereby, wiring terminals for said contacts supported by said insulating base, a tubular shank secured to said insulating base through which the conductor is passed to said wiring terminals, said shank having an integral outwardly extending flange at its junction with the insulating base, interengaging means on said tubular shank and insulating base for preventing relative rotation therebetween, and a sheet metal ring secured to said insulating base and flanged over said outwardly extending flange for securing said parts together, said interengaging means comprising a boss on said flange, said insulating base being provided with a recess for receiving said boss.

In witness whereof, I have hereunto subscribed my name.

REUBEN B. BENJAMIN.