No. 825,444. PATENTED JULY 10, 1906.

R. B. BENJAMIN.

ELECTRIC LAMP SOCKET.

APPLICATION FILED FEB. 27, 1904.

Fig. 1.

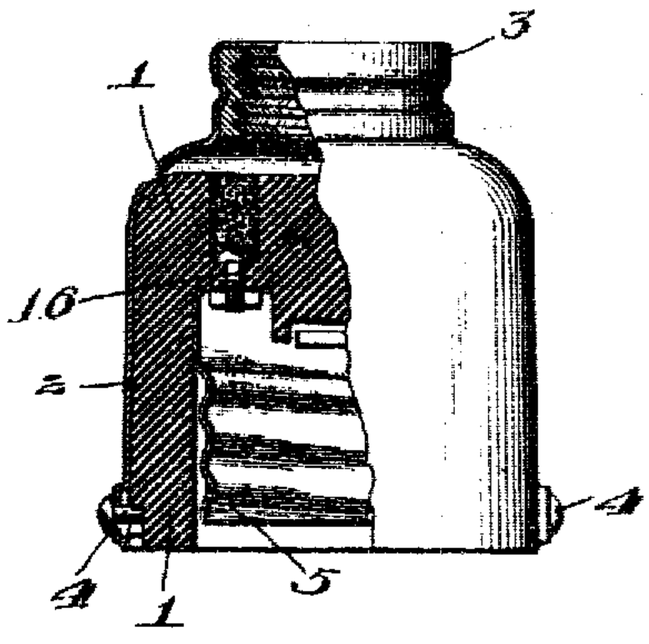


Fig. 2.

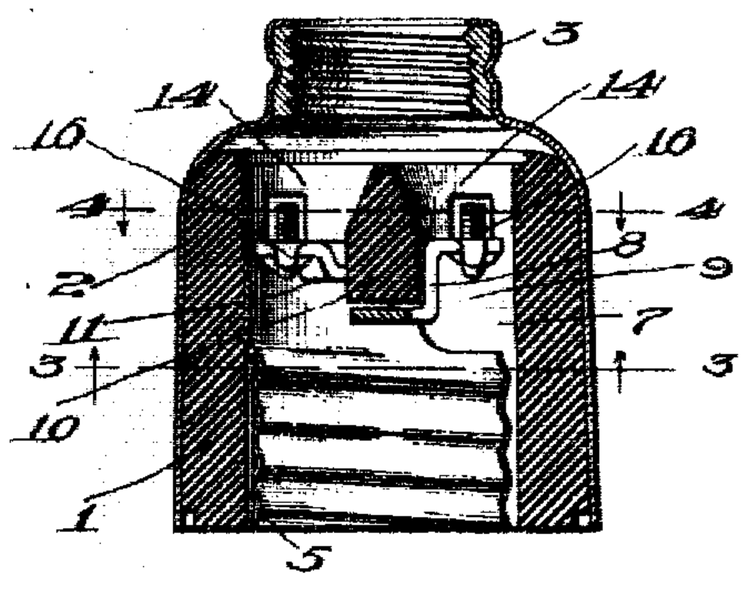


Fig. 3.

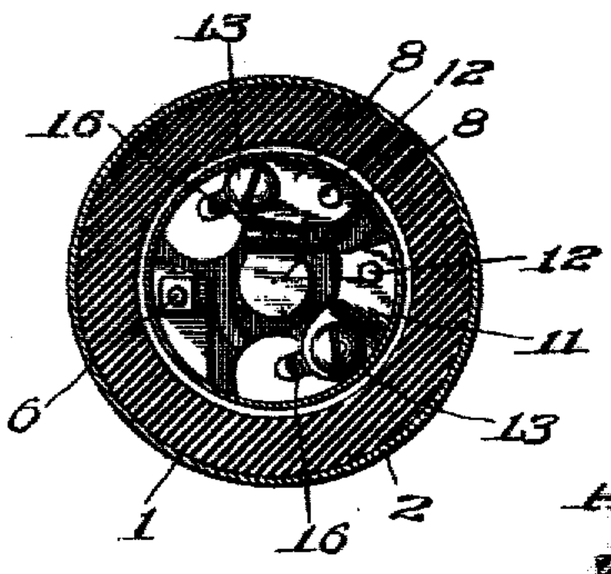


Fig. 5

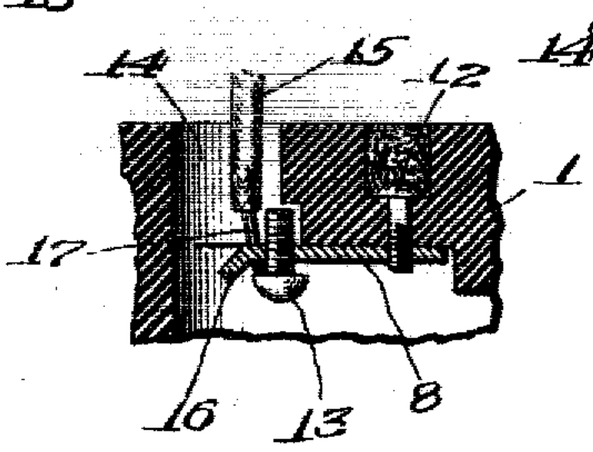
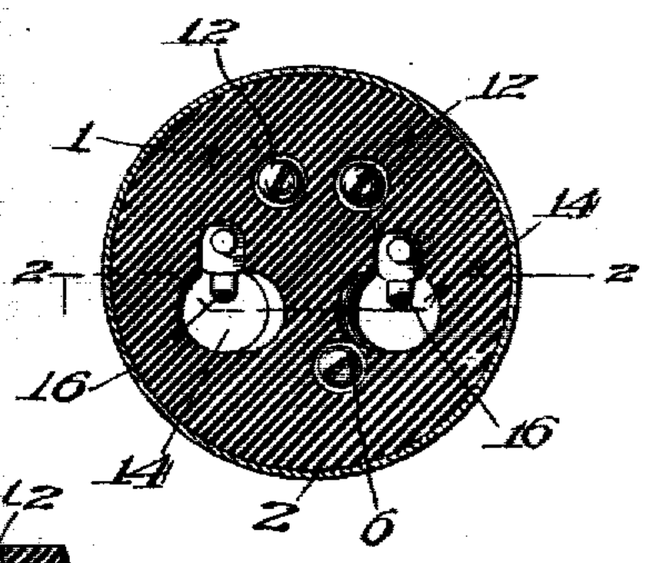


Fig. 4.



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UNITED STATES PATENT OFFICE.

REUBEN B. BENJAMIN, OF CHICAGO, ILLINOIS.

ELECTRIC-LAMP SOCKET.

No. 825,444. Specification of Letters Patent. Patented July 10, 1906.

Application filed February 27, 1904. Serial No. 195,632.

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 a certain new and useful Improvement in Electric-Lamp Sockets, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to electric-lamp sockets, and more particularly to improved means for wiring the same.

In an application for United States Letters Patent filed March 21, 1903, Serial No. 148,861, I have described a lamp-socket embodying certain generic principles of construction, and I have inserted in said application generic claims thereon.

The present invention relates to a species of the generic invention described and claimed in said application above mentioned, and it is to be understood that the present application is subsidiary to the pending application aforesaid.

The object of my invention is to provide a lamp-socket having means associated therewith whereby the same may be readily and conveniently wired.

My invention is particularly applicable to weatherproof sockets; but it will be understood that the features of my invention are also applicable to other forms of sockets.

I have illustrated my invention in the accompanying drawings, in which like characters indicate like parts throughout the several figures.

Figure 1 is a side elevation of my improved socket, showing parts broken away to expose the interior. Fig. 2 is a sectional view on the line 2 2 of Fig. 4. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a sectional view on the line 4 4 of Fig. 2. Fig. 5 is an enlarged detail view showing the method of wiring.

Referring to the drawings more particularly by reference characters, the base 1 is made of insulating material and is preferably housed in a one-piece metal casing 2; but this is not essential, as any suitable casing may be employed. The casing 2 is preferably formed with a tapering rear end 3, which is threaded to receive a conduit or support, as shown, the base 1 being retained within the casing in any suitable manner, as by the screws 4, a recess being formed in the base to receive the same. Disposed within a recess in the base 1 is a lamp-receiving shell 5, held in position therein by bolts or screws 6, passing downward through the base 1. A portion of the lamp-receiving shell 5 is cut away, as shown at 7 in Fig. 2, to permit the center contact-plate 8 to pass through the same. This plate is preferably disposed in a recess 9, formed in the bottom of the base 1, and has a portion thereof bent outwardly and adapted to rest upon a central projection or wall 10, formed in the bottom of the base 1, which wall or projection serves to insulate the center contact-plate 8 from the other lamp contact-plate 11, also being disposed in a recess formed in the base 1. Bolts or screws 12 12, passing downwardly through the base 1, secure the contact-plates 8 and 11 in position on the front of the base, the usual binding posts or screws 13 13 being carried by the contact-plates 8 and 11 and accessible from the front of the socket. The particular formation of the contact-plates above described and their arrangement in the base 1 are not essential, and the form and disposition of the lamp-contacts may be varied without departing from the spirit of my invention. I preferably provide two openings or channels 14 14 in the rear end of the base 1, through which the leading-in wires 15 may be passed, the walls of said openings being provided with flaring walls to more readily guide the leading-in wires to the binding-posts; but this is not essential.

Projecting into the openings or channels 14 are small fingers 16, preferably formed integral with the contact-plates 8 and 11 and bent slightly toward the front of the socket to permit the feed-wires when inserted from the rear of the socket through the channels 14 to be readily hooked over the fingers 16 and lodged so as to be clamped in position when the binding-screws 13 are tightened, as shown in Fig. 5.

In my former application above referred to it is necessary to wrap the leading-in wires about or insert the same under the binding-screw in making a connection, which is more or less difficult. I desire to provide means whereby the socket may be wired without the necessity of any manipulation of the wire or any change in the form thereof after the wire has been inserted in the socket, and I accomplish this by bending the end of the wire to form a hook or by removing a portion of the insulation therefrom and forming a loop therein, which is inserted from the rear

of the socket and after being placed over the finger 16 the binding-screw 13 may be screwed down from the front of the socket against the wire, as above described. Instead of the fingers and screws I contemplate as an equivalent any means for wiring the lamp-socket in which the condition or form of the wire is not changed or in which no manipulation of the wire is required after the wire is inserted in the socket. I am aware that the particular form of my invention above described, which I have worked out for commercial purposes, may be varied and that other mechanical means for wiring the socket which do not require the wrapping of the feed-wire about the binding-screws or other manipulation of the wire after the wire has been inserted in the socket may be adopted.

The method of wiring my improved socket is obvious. A portion of the insulation having been removed from the leading-in wires, a loop or hook is formed therein and being inserted from the rear of the socket is placed over the finger 16. The binding post or screw 13 may then be driven home from the front of the socket and a firm electrical connection between the leading-in wires and the contact-plates secured.

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

1. In a lamp-socket, a lamp-receptacle and suitable contacts therein, passage-ways extending through the rear of the socket and communicating with said receptacle for the entrance of the leading-in wires and a pair of binding-posts in the bottom of said receptacle consisting of screws accessible from the front of the socket, and coöperating fingers projecting into said passage-way over which fingers the leading-in wires are adapted to be looped and clamped by said screws.

2. In a lamp-socket, an insulating-base, having a lamp-receiving receptacle formed therein, a metallic inclosing casing for said base having a threaded opening at the rear end for engagement with a conduit or support, suitable conacts in said lamp-receptacle, a pair of passage-ways extending through the rear of said base and communicating with said receptacles, and a pair of binding-posts in the bottom of said receptacle consisting of screws accessible from the front of the socket, and overhanging fingers projecting over said passage-ways around which the leading-in wires are adapted to be looped and clamped by said screws.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.

REUBEN B. BENJAMIN.

Witnesses:

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C. B. CAMP.