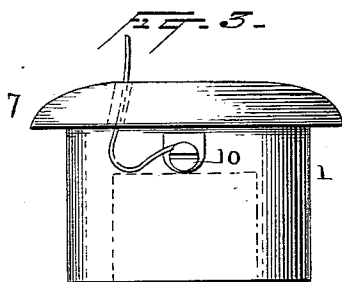
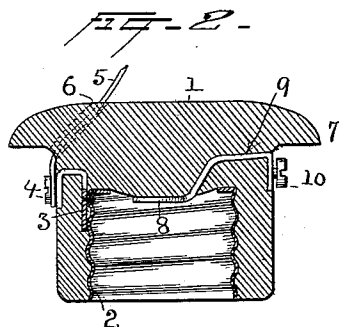
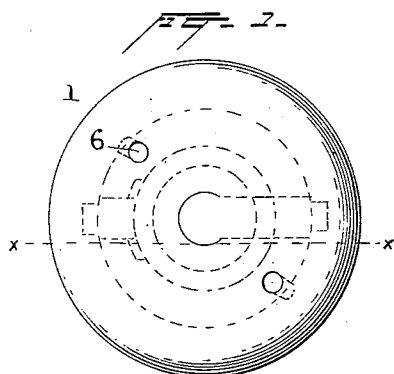


(No Model.)

H. W. LEONARD.
ELECTRIC LAMP SOCKET.

No. 560,168.

Patented May 12, 1896.



Witnesses
Morris A. Clark.
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HARRY WARD LEONARD, OF NEW YORK, N. Y., ASSIGNOR TO THE EDISON
GENERAL ELECTRIC COMPANY, OF SAME PLACE.

ELECTRIC-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 560,168, dated May 12, 1896.

Application filed June 28, 1890. Serial No. 357,084. (No model.)

To all whom it may concern:

Be it known that I, HARRY WARD LEONARD, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a new and useful Improvement in Electric-Lamp Sockets, of which the following is a specification.

In sockets as heretofore constructed difficulty has been found in excluding moisture from the electric terminals of the socket when said socket was used in exposed places. The water collecting on the wires and top of the socket has been found to work along the wires and through openings in the upper side of the socket to the terminals and in many cases has occasioned a short circuit in the socket. This has not been entirely prevented by the improved insulating materials placed around the wires and over the openings in the socket for this specific purpose, owing to the fact that the quality of the insulating material deteriorates with continued use and to other causes, such as the effects of extreme heat or cold, or the action of gases, acids, &c., which may come in contact therewith.

My lamp-socket is made entirely of glass or other vitreous material or similar homogeneous insulating material, glazed or unglazed, of a durable character and which is practically unaffected by extremes of heat or cold and by the acids or other substances to which it is exposed, and which incloses and supports the brass or other metal terminals to which the circuit-wires are connected, as hereinafter described.

In the accompanying drawings, which illustrate the invention, Figure 1 is a plan view of the socket. Fig. 2 is a section thereof on line *x x*, and Fig. 3 is a side view showing the manner in which a circuit-wire is connected with a terminal of the socket.

The invention is shown as embodied in a socket adapted for use with the well-known Edison lamp; but it will be evident that it may be adapted to other lamps by a mere change in the shape of the metal terminals without departing from my invention.

The body of the socket is made of glass, porcelain, or other similar material, and is preferably cast or molded around the con-

ducting-terminals, thereby holding them securely in place without the use of any cement or other fastening medium, whereby the entire device consists of the durable insulating-body and the metal terminals.

In the drawings, 1 is the body of the socket; 2, a screw-threaded ring-terminal adapted to make contact with the corresponding sleeve on a lamp-base.

3 is a metal piece soldered or riveted to the ring and terminating at the outer surface of the glass body.

4 is a clamping-screw for connecting the circuit-wire 5 to the extension-piece 3. Said wire 5 passes through a perforation 6 in the overhanging flange 7 of the socket. This perforation, as well as the perforation on the other side of the socket, is preferably placed at one side of the screw 4, in order that any water which may follow along the wire through the perforation will not tend to fall onto the clamping-screw and wire at the point of connection with terminal 3. The wires of the circuit where they extend through these perforations and connect with the clamping-screws may be insulated or uninsulated at will. It will be evident that the body of the socket will prevent the wires coming together and will efficiently insulate the same.

8 is a second contact in the socket and consists of a disk or plate, to which is connected an extension 9, also terminating at the surface of the socket.

10 is a clamping or binding screw for connecting the second circuit-wire to its terminal of the socket. Other means for connecting the wires to the terminal extensions may be employed. This second wire also passes through a perforation in flange 7 at one side of the screw 10.

As shown in the drawings, my improved lamp-socket has no openings leading to its interior for the entrance of conductors, as heretofore. The metal terminals 3 and 9 are sealed in the molded body and the circuit connections thereto are made on the exterior of the socket. Thus no moisture, acids, or gases can enter the socket when a lamp is in place.

I am aware that it is old to support termi-

nals in insulating-sockets and to embed terminals in organic insulating material, such as rubber, and these things I disclaim.

Without limiting myself to all the details
5 as above described, what I claim is—

A lamp-socket comprising essentially two insulated conductors permanently embedded in a single piece of non-conducting moldable or castable material, the exterior ends of the

conductors being located beneath an over-
hanging ledge forming part of the socket, sub-
stantially as set forth.

This specification signed and witnessed this
26th day of June, 1890.

HARRY WARD LEONARD.

Witnesses:

D. H. DRISCOLL,

CHARLES M. CATLIN.