

UNITED STATES PATENT OFFICE.

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LAMP-SOCKET.

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To all whom it may concern:

Be it known that I, WALTER A. CHURCH, a citizen of the United States, and a resident of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Lamp-Sockets, of which the following is a specification.

My invention relates to the class of devices used for supporting an electric lamp, usually of the incandescent type, the lamp being supported from wires or rigidly supported.

The object of my invention is to provide a device of this class having a small number of parts, one that can be economically constructed and easily assembled, and one that shall be extremely effective and durable in use.

A form of device by the use of which these objects may be attained is illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the socket. Fig. 2 is a bottom view of the same. Fig. 3 is a view in central longitudinal section of the device on a plane passing through the grooves for the reception of the wires. Fig. 4 is a view in cross-section through the lamp portion of the base just below the dividing-line between the two sections. Fig. 5 is a view in longitudinal section on a plane passing through holes for the attaching-screws. Fig. 6 is a side view of the device. Fig. 7 is a view showing the embodiment of the invention in a socket adapted to rigidly secure the lamp in position.

My improvement is adapted to that form of a socket in which the use of a key or like part to control the current is not required; the device consisting of a base formed in two sections, a wire-section 1, to which the wires are immediately attached or which are directly connected with the wires supplying the current. This section of the base has a groove 2 extending across one end and along the sides, and in this groove the wires 3 are located.

A lamp-section 4 is secured to the wire-section as by means of screws 5, passing through the two parts. These screws serve also to unite a bearing-plate 6 and a contact-plate 7 to the lamp-section 4, these two plates being preferably located on diametrically opposite sides of the lamp-section of the base. The

lamp-section 4 is provided with a groove 8, in which the plates 6 and 7 are located in whole or in part, as desired.

Conductors 9 and 10 are secured in sockets in the two sections of the base, these conductors each passing through the substance of the lamp-section 4 of the base and the upper ends of each of the conductors passing into sockets 11, formed in the wire-section 1 of the base. Binding-screws 12 are employed for securing the end of the wire to each of these conductors. The conductor 9 passes downward into the base 4 and then in a radial line to the center, from whence it projects downward into the nipple 13, to which the lamp is adapted to be secured.

In use the current is designed to pass in along the conductor 9 into the lamp and out through the plate 7 and conductor 10, in the form of the device shown this plate and conductor being formed of a single piece. The nipple 13 is secured and held in place by the conductor 9, these two parts being united by any convenient form of fastening.

In the form of the device shown in Fig. 7 the invention is shown as applied to a lamp-socket which is designed to be attached to a cap 14 or like part, the latter having means for connection to a base 15. In this form of the embodiment of the invention the nipple 16 is secured to a screw 17, which passes directly through both the lamp-section 18 and the wire-section 19 of the base. Any convenient form of attachment of the screw to the nipple may be employed, and the screw also serves to hold the contact 20 in place and secure it to the cap 14. The contact 21 is secured in place by a conducting-screw 22, passing through both sections of the base. In this form of the device the current passes in at the conductor 23 through the contact 20 and screw 17 into the lamp and out along the conducting-screw 22 into the contact 21 and out through the conductor 24. The conducting-screw 22 is also employed for securing the contact 25 to the socket, the electric current passing from the lamp into this contact and into the conducting-screw.

It is obvious that the invention may be embodied in a device the construction of which

differs somewhat from that shown in the drawings, and I do not desire to limit myself to the precise form of construction herein shown and described; it being understood that any structure in which one of the conductors is secured directly to the nipple for receiving the lamp will come within the scope of the invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A base, means for attachment of a lamp thereto said means forming a contact for the lamp, a contact operatively arranged upon the base and coöperating with the first-named contact, recesses formed in and inclosed by the material of the base and adapted to receive conductors, conductors arranged in said recesses and extending from the said contacts, and recesses intersecting the recesses of the base whereby the conductors are exposed only at the intersection of the recesses.

2. A base, a nipple for the reception of a lamp, a contact coöperating with said nipple, the two forming the lamp-contacts, conductors extending from the nipple and contact through the material of said base and adjacent to the sides thereof, and recesses in the base transversely arranged with relation to and intersecting the material of the base adjacent to the conductors whereby said conductors are exposed only at one point intermediate their ends.

3. A base formed of two sections, means for uniting the sections, recesses in each of said sections for conductors, conductors arranged in said recesses, lamp-contacts operatively arranged with relation to said contacts on one of the base-sections, and recesses intersecting the conductor-recesses whereby said conductors are exposed only as to a portion of their length.

4. A base formed of two sections, means for uniting the sections, lamp-contacts arranged upon one of said sections, conductor-recesses formed within both sections, conductors arranged within the recesses and connected with the lamp-contacts, and recesses partially

formed in each of the base-sections and intersecting the conductor-recesses at the juncture of said sections whereby the conductors are exposed.

5. A base formed of two sections, means for uniting the sections, lamp-contacts arranged upon one of said sections, conductor-recesses formed within both sections, conductors arranged within the recesses and connected with the lamp-contacts, recesses partially formed in each of the base-sections and intersecting the conductor-recesses at the juncture of said sections whereby the conductors are exposed, and recesses for a pair of line-wires formed in the exterior of one of the base-sections.

6. A base formed in two sections, means for uniting the sections, a conductor attached to the nipple at one end and projecting through the lamp-section of the base to the outer surface and into the wire-section of the base, means for attachment of a line-wire to said conductor for conveying the electrical current in one direction, and a conductor passing through the lamp-section of said base to the outer surface and into the wire-section, and means for attaching a wire thereto for conducting said current in an opposite direction.

7. A base formed in two sections each section containing portions of recesses located on opposite sides of the base, a nipple for the attachment of a lamp arranged upon one section, a conductor attached to the nipple and projecting through the lamp-section of the base into the recess on one side, means for attachment of a wire to said conductor for conducting the electrical current in one direction, a conductor projecting through the lamp-section of the base into the recess on the opposite side of the base, and means for securing a wire to said conductor for conducting the current in the opposite direction.

WALTER A. CHURCH.

Witnesses:

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