(No Model.)

D. A. SCHUTT.

INCANDESCENT LAMP SOCKET.

No. 595,584. Patented Dec. 14, 1897.

Fig. 1.

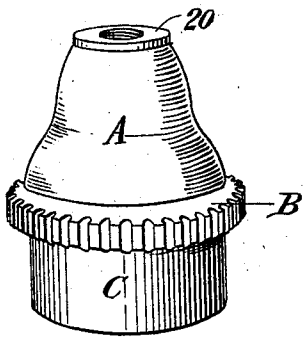


Fig. 2.

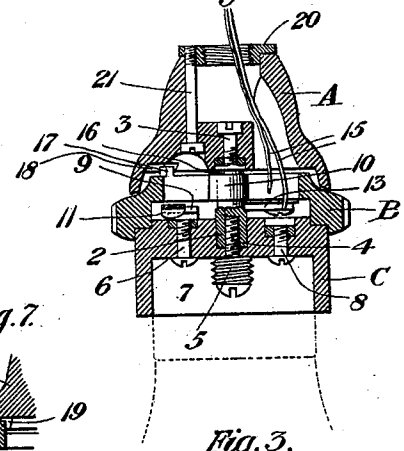


Fig. 7.

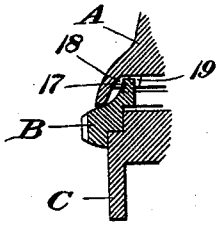


Fig. 8.

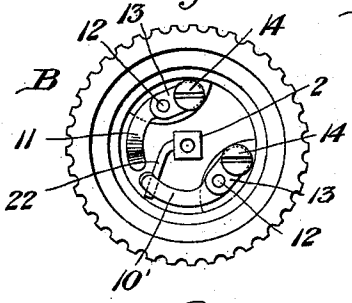


Fig. 3.

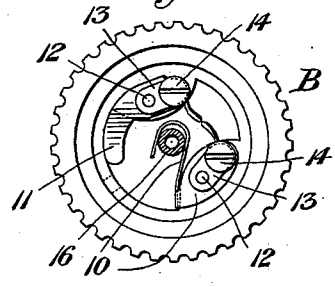


Fig. 5.

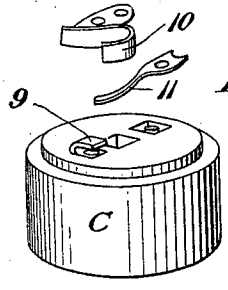


Fig. 4.

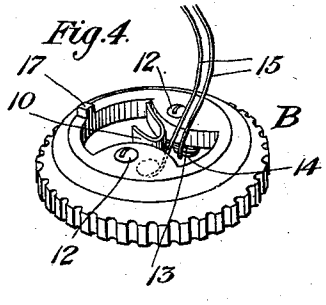
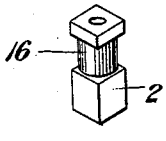


Fig. 6.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DUNY A. SCHUTT, OF PERU, INDIANA, ASSIGNOR TO THE PERU ELECTRIC MANUFACTURING COMPANY, OF SAME PLACE.

INCANDESCENT-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 595,584, dated December 14, 1897.

Application filed April 16, 1897. Serial No. 632,437. (No model.)

To all whom it may concern:

Be it known that I, DUNY A. SCHUTT, a citizen of the United States, residing at Peru, in the county of Miami and State of Indiana, have invented or discovered a new and useful Improvement in Sockets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this application, in which—

Figure 1 is a view in perspective of my improved socket. Fig. 2 is a central vertical section thereof. Fig. 3 is an under plan view of the center revolving ring, the central connecting-post being shown in section. Fig. 4 is a detail view in perspective showing the upper part of the ring. Fig. 5 is a perspective detail of the lower stationary base and the central springs detached. Fig. 6 is a detail view in perspective of the central connecting-post. Fig. 7 is a sectional detail view showing the limiting-stop. Fig. 8 is a view similar to Fig. 3, illustrating a modified construction of contact-springs.

My invention consists of an improvement in sockets for incandescent lamps, made of porcelain or other insulating material, constructed of three main parts and the various connections and contact-terminals and is designed to operate to open or close a circuit by turning the middle part. Heretofore sockets for this purpose have been composed entirely or in part of metal, which is liable to make short circuits or become heated and cannot be used in an atmosphere charged with acids or salts. By the use of a porcelain socket I obviate these difficulties and secure a serviceable and reliable socket at a reasonable cost.

Referring to the drawings, the socket is composed of an upper securing-base portion A, a lower lamp-receiving base C, and an intervening revolving current-shifting ring B. The upper and lower bases are held rigidly together and in a fixed relation to each other by a square post 2, secured to the upper securing-base by a screw 3 and to the lower by a screw 4, provided with an enlarged threaded head 5, upon which the base of the lamp is screwed and which constitutes one of the terminals of the circuit. The other terminal, when the circuit is closed, is a screw 6, the head of which extends into the cavity 7 of the lower base C and bears on the end of the lamp, as indicated in dotted lines. A similar screw 8 is inserted at the opposite side to equalize pressure.

To the upper face of the base C is secured by the screw 6 the contact-spring 9, turned over in a hook shape, so as to insure a rubbing contact.

The center ring B has secured to properly-shaped bosses, on their under side, the contact-springs 10 11, held in position by screws 12, passing through the porcelain bosses and into securing conducting-plates 13, supplied with binding-screws 14, to which are attached the ends of current-wires 15.

The spring 10 is turned around and embraces a reduced rounded portion 16 of the post 12, with which, and consequently with the screw 5, is always maintained an electrical connection from one of the wires 15. The spring 11 projects downwardly and in one position of the revolving center ring B makes electrical contact with the contact-spring 9, thereby closing the circuit and establishing a current through the lamp.

When the ring B is reversed, the spring 11 is withdrawn from contact and the circuit is broken.

It will be seen that the ring B is free to turn between the upper and lower bases, and I have provided a limiting-stop 17, projecting upwardly from the edge of the ring and into a recess 18, having shoulders 19 at each end against which the stop 17 abuts to limit the rotation of the ring, the shoulders being so located as to allow sufficient motion of the ring to make and break the circuit.

The edge of the ring B is knurled, as shown, to facilitate turning and to indicate the operation.

The upper securing-base is hollow, so as to allow the wires to be introduced to the binding-screws, and it is supplied at the top with a screw-threaded bush 20 for attachment to a chandelier or elsewhere, the bush being secured in position by a screw 21.

In Fig. 8 I have shown a modified construction in which the spring 10′ has a constant rubbing contact on a pin 22 of the post 2, and such and other variations in the manner of

making contact with the post I consider as within the scope of my invention.

By my improved construction I am enabled to dispense with the use of a key and have secured an extremely neat and serviceable device for the objects in view.

It will be observed that the parts extend over and make a close joint, thereby preventing entrance of moisture, as when exposed to the weather, in mines, &c. The socket is so designed that it may be used with a flexible connection through the bush 20, if desired, the socket in such cases hanging pendent.

Changes may be made by the skilled mechanic within the scope of my invention, and I desire to include all such as equivalents of my construction.

What I claim is—

1. A three-part socket composed of insulating material comprising a base provided with a securing-bush, a lamp-socket, a rigid metallic intervening connecting-post, and an intervening movable knurled-edge shifting ring provided with wire connections, and contact-springs arranged to make electrical connection with terminals in the lamp-socket, substantially as set forth.

2. A three-part socket composed of insulating material comprising a securing-base, a lamp-receiving socket, a rigid metallic intervening connecting-post provided with means for attachment of a lamp within the socket comprising a normally-closed terminal, and a terminal mounted in the socket designed to contact with the base of a lamp, with an intervening movable shifting ring provided with binding attachments for circuit-wires, and contact-springs for transmitting the current to the terminals, substantially as set forth.

3. In a three-part socket composed of insulating material, a rigid metallic intervening post connecting the securing-base with the lamp-socket, provided with a threaded securing-screw in the lamp-socket for attachment of the lamp, and a contact-spring secured to the intervening movable ring and embracing a rounded portion of the post, substantially as set forth.

4. In a three-part socket composed of insulating material comprising a securing-base and a lamp-socket held together by a rigid metallic intervening connecting-post and an intervening movable shifting ring provided with a contact-spring in engagement with the post; a projection on the ring and a corresponding recess in the base provided with abutting ends for limiting the movement of the ring, substantially as set forth.

In testimony whereof I have hereunto set my hand this 27th day of January, 1897.

DUNY A. SCHUTT.

Witnesses:
WM. B. MCCLINTIC,
NOTT N. ANTRIM.