970,581.

W. H. WALTERS.

ELECTRIC LIGHT SOCKET.

APPLICATION FILED NOV. 13, 1909.

Patented Sept. 20, 1910.

Fig. 1.

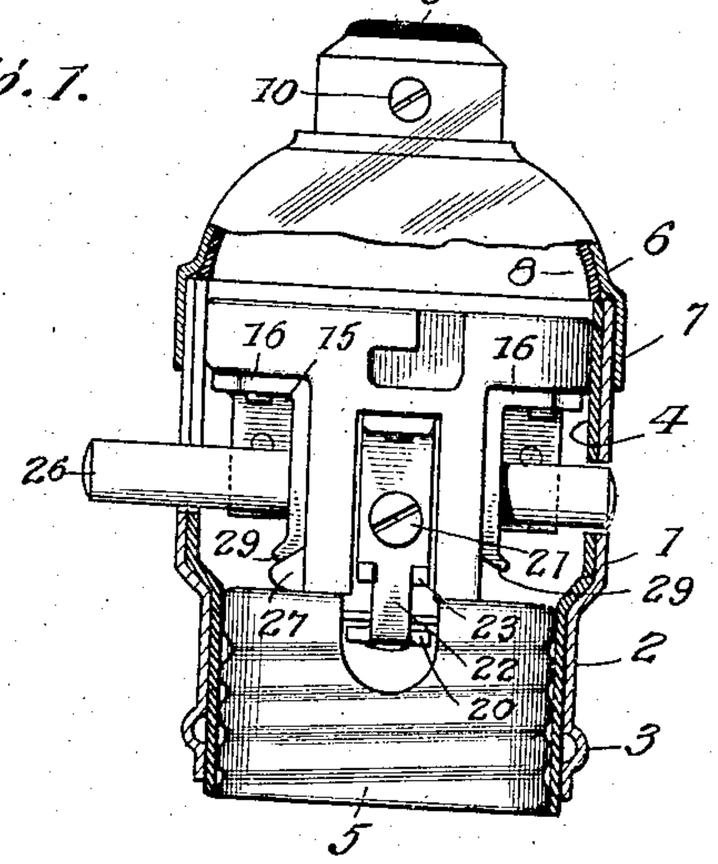


Fig. 2.

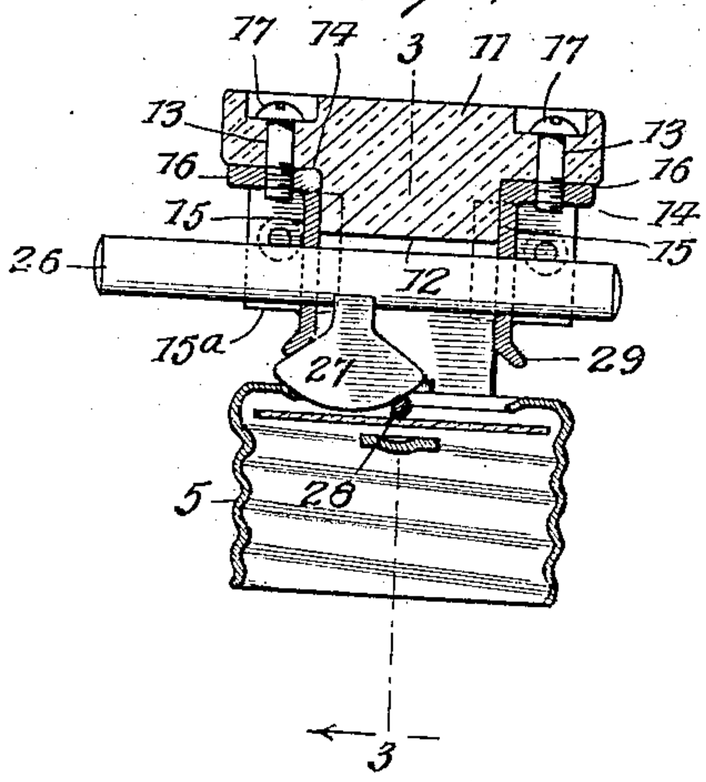
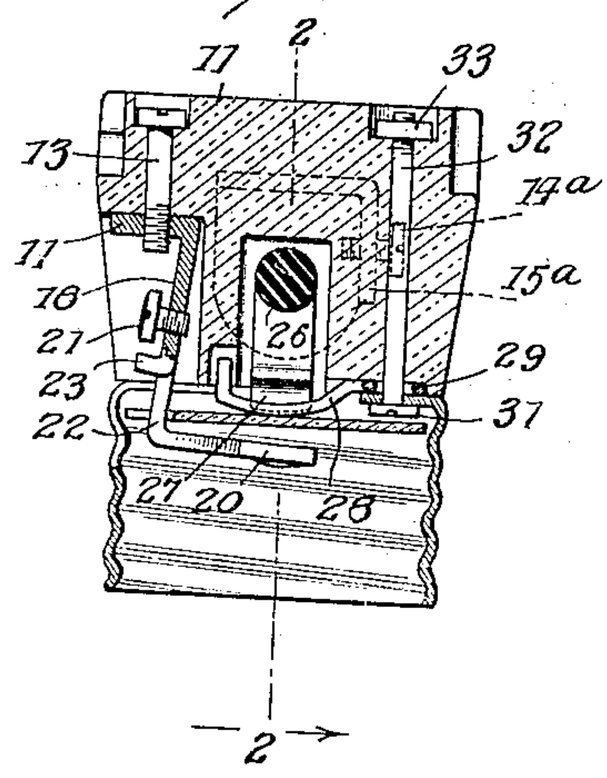


Fig. 3.



WITNESSES

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ELECTRIC-LIGHT SOCKET.

970,581. Specification of Letters Patent. **Patented Sept. 20, 1910.**

Application filed November 13, 1909. Serial No. 527,798.

To all whom it may concern:

Be it known that I, WILLIE H. WALTERS, a citizen of the United States, and a resident of Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Electric-Light Sockets, of which the following is a specification.

My invention is an improvement in electric light sockets, and consists in certain novel constructions, and combinations of parts hereinafter described and claimed.

The object of the invention is to provide a three point socket having a novel turning off mechanism, which may be easily operated.

Referring to the drawings forming a part hereof, Figure 1 is a longitudinal section of the improvement. Fig. 2 is a section on the line 2—2 of Fig. 3, and Fig. 3 is a section on the line 3—3 of Fig. 2.

The embodiment of the invention shown in the drawings, consists of the preferably tubular casing 1, having a reduced portion 2 at one end, and beaded as at 3 near the end of the reduced portion, and a lining 4, fitting the casing closely.

A threaded shell 5 is arranged in the reduced portion for engaging the usual bulb, and the outer end of the casing is closed by a cap ring 6, having a flange 7 fitting outside the casing, and a lining 8, and in the end of the cap ring is inserted the insulating plug 9, secured in place by a set screw 10. The cap is locked to the casing in the usual manner.

A plug 11 of insulating material is arranged adjacent to the cap, and is provided over a part of its circumference with a reduced portion 12 adjacent to the threaded shell, and with a plurality of longitudinal openings 13 at the sides of the reduced portion and arranged at angles of 90° from each other. The provision of the reduced portion provides a shoulder 14, and three contact bars are arranged around the reduced portion.

Two of the diametrically opposite bars consists each of a body portion 15 lying alongside the reduced portion of the plug, and an angular portion 16 lying against the shoulder, and radial to the plug, secured to the plug by a screw 17 which passes through the adjacent opening 13 and engages a threaded opening in the angular portion. Each bar is also provided with a wing 15^a extending substantially radially from the plug and at right angles to both the body portion and the angular portion, and a set-screw 14^a is threaded through each wing.

The bars just described are at diametrically opposite points, and one of the intermediate bars consists of a body portion 18, and an angular portion 19 secured by a screw 17 in the same manner as the other bars, but the body portion of the said bar is sprung away from the reduced portion as shown in Fig. 3, and at its inner end is provided with an angular portion 20, extending in the opposite direction from the portion 19. The body portion 18 of the bar in question is also provided with a set screw 21 threaded therethrough for engaging the reduced portion of the plug, and both the body portion and the angular portion 20 are cut away as at 22 on each side, and a lug 23 projects outwardly on each side of the body portion, at the commencement of the cut away portion. The free end of the angular portion 20 is headed as at 24, and extends to the center of the casing as shown in Fig. 3, and the reduced portion of the plug is provided with a transverse slot 25, whose ends are covered by the first named contact bars.

A key or shaft 26 of insulating material extends through the slot, and is journaled in the said bars, and the said key or shaft is provided at approximately its center with a contact maker 27 of conducting material, approximately segmental in outline, and secured to the shaft by its apex. The free edge of the contact maker is adapted to make contact between either of the bars 15, and the threaded shell 5 of the socket.

A wire which extends about half way between the free ends of the contact bars, acts as a spring 28 to hold contact maker 27 in tight connection with either bar 15 which are bent outwardly as at 29, and the attached end of the wire is provided with an eye 30, which is received between the head 31 of a bolt 32, and the end of the reduced portion of the plug, the bolt extending through the remaining opening 13, and being secured in place by a nut 33.

It will be evident from the construction, that when the key is moved longitudinally, the contact maker 27 is changed from one bar 15 to the other bar 15, thus changing the connection of shell 5. A plate 34 of insulat-

ing material is arranged between the shell 5 and the head 20 of the third contact bar. One of the bars 15 is connected to one of the terminals of the feed circuit, while the other is not connected when the lamp is used as a two point socket. When used as a two point socket, one of the terminals of the feed circuit is connected with the bar 18, and the other terminal with either bar 15, thus leaving the other bar a dead point. When used as a three point socket, the bar 18 is connected with one terminal of the feed wire, and each bar 15 is connected with a point of the usual three point switch. The operation is, however, the same as when used as a two point socket. When used as a three point socket connected with a three point switch, the desired results in making and breaking circuit are attained at either the switch or socket.

I claim:

1. A device of the character specified comprising a shell, a plug of insulating material to which the shell is connected, oppositely arranged bars of conducting material supported by the plug, said plug having a transverse opening, and the said bars covering the ends of the opening and each having a bearing registering therewith, a key comprising a stem of insulating material slidable through the bearings and a contact maker of conducting material, a third bar at right angles to the key and having a head extending into the shell and insulated therefrom, said shell being threaded, and a spring to hold said contact-maker.

2. A device of the character specified comprising a plug of insulating material, a key comprising a stem of insulating material slidable through the plug, and a contact maker of conducting material, a contact bar for engagement by the contact-maker at each end of the movement, said bars having bearings in which the stem is slidable, a threaded shell, and a spring to hold said contact-maker.

3. In a device of the character specified, a plug of insulating material having a transverse opening, a threaded shell connected with the plug, a contact bar at each end of the opening, each bar having a bearing, an insulated stem slidable in the bearings, a spring for holding the stem in adjusted position, and a contact maker of conducting material on the stem for connecting either of the bars with the shell.

4. In a device of the character specified, a threaded shell, oppositely arranged contact bars on the shell and insulated therefrom, each of said bars having a bearing, a stem of insulating material slidable in the bearings, and a contact maker on the stem for connecting either of the bars and the shell.

5. In a device of the character specified, a plug of insulating material, a threaded shell for engaging a plug, a pair of resilient contact bars secured to the plug, one of said bars having an angular portion extending to the center of the shell, means for connecting either of the bars with the shell and a plate of insulating material between the shell and the angular portion.

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Witnesses:
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