(No Model.)

F. A. WELLER.

INCANDESCENT ELECTRIC LAMP SOCKET.

No. 449,604. Patented Mar. 31, 1891.

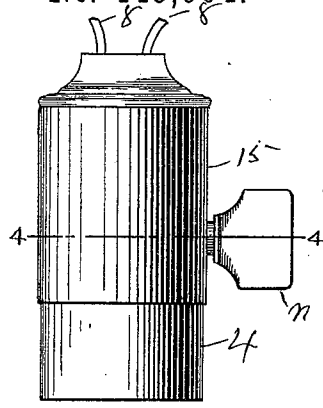

Fig. 1.

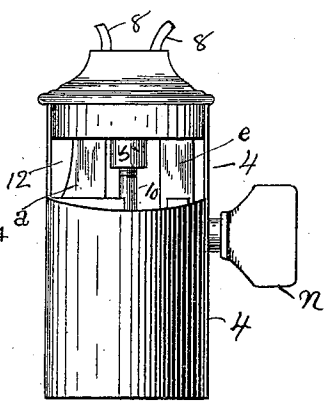

Fig. 2.

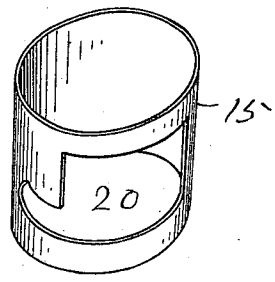

Fig. 3.

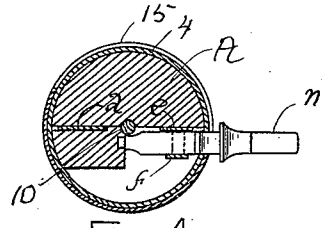

Fig. 4.

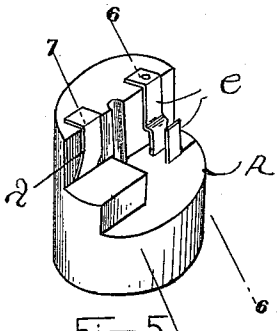

Fig. 5.

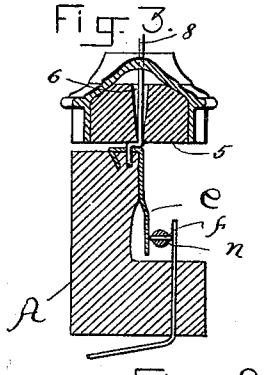

Fig. 6.

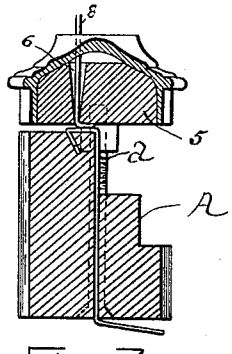

Fig. 7.

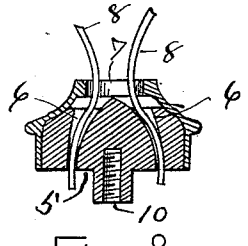

Fig. 8.

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UNITED STATES PATENT OFFICE.

FRANKLIN A. WELLER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO WILLIAM S. HADAWAY, JR., TRUSTEE, OF SAME PLACE.

INCANDESCENT-ELECTRIC-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 449,604, dated March 31, 1891.

Application filed August 11, 1890. Serial No. 361,752. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN A. WELLER, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain Improvements in an Electric-Lamp Holder or Socket, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to electric-lamp holders, and has for its object to facilitate the operation of connecting and disconnecting or otherwise adjusting the circuit-wires leading from the main line to the lamp-contacts.

It further consists in matters of construction, all of which are hereinafter fully described and specifically claimed.

In the accompanying drawings, Figure 1 is a side elevation of a mechanism embodying my invention. Fig. 2 is a similar view with the outer inclosing barrel removed. Fig. 3 is a perspective view of said outer barrel. Fig. 4 is a cross-section on line 4 4 of Fig. 1. Fig. 5 is a perspective view of the core-block for holding the contact-plates. Fig. 6 is a vertical section on line 6 6 of Fig. 5. Fig. 7 is a vertical section on line 7 7 of Fig. 5. Fig. 8 is a sectional view of the top of the holder.

In carrying out my invention I employ a core-block, as A. Said core-block is constructed as shown in Fig. 5. It is composed of insulating material and supports the contact-plates. Said plates are composed of pieces of thin conducting material, (bronze being preferred,) and are supported in the core, as shown in Figs. 6 and 7. To this end the core is fitted to receive the contact-strips, as shown. The contact *a* is composed of one piece, while the contact *e* comprises two pieces and a pin *f*. Said pin *f* is located in a thumb-key *n*, the key being adapted to permit revolving movement for displacing the pin *f* and breaking the circuit to the lamp whenever required. To that end the thumb-key has its inner end journaled in the core A and extends outwardly through an opening in the shell or casing 4, being also supported by the casing, as referred to hereinafter.

In the end of casing 4 is a guide-block 5, composed of insulating material and secured firmly in position within the casing, as shown in Fig. 8. Said casing 4 is designed to inclose the core A, as shown in Fig. 2, and is elongated sufficiently to form a socket for the lamp-shank to enter behind the core A. It is provided with an opening in its opposite end and is screw-threaded to receive the end of a supporting-arm or bracket. The block 5 is provided with guide-passages 6 6, which are preferably enlarged as they approach the opening 7, where they are separated by a thin wall of the block 5. Said guide-passages terminate in small openings through the bottom face of block 5 in line with the contact-plates *a e* of the core-block A. The leading-in wires 8 8, passing in through the opening 7, are divided by the sharp wall of block 5 and made to pass, respectively, into the guide-passages 6 6, by which they are guided, to emerge from the block 5, in close line with contact-plates *a e*. The wires are then held in position by clamping their ends between the block 5 and contact-plates *e a*. To this end the core-block A is provided with a central opening, through which is passed a screw 10, the end of which screw enters a suitable screw-threaded opening in block 5. (See Fig. 8.) By turning this screw 10 the block 5 and core are drawn together. Obviously, therefore, the leading-in wires 8 8, if turned suitably, may be clamped and held between said block and core. To this end the core is cut away, so that one of the leading-in wires will enter and project downwardly along the side of contact-plate *a*, while the other enters a hole and passes through the top of contact-plate *e* into a recess in core A. The wires having been thus centered and projected forward sufficiently, a partial turn of the core-block A on its screw-shaft 10 operates to bend over the ends of leading-in wires 8 8 and cause them to bear respectively on the contacts *a e*, as shown in Fig. 7, whereupon a turn of the screw 10 draws upwardly the core A and thus clamps and holds the leading-in wires between the block 5 and contiguous faces of contacts *a e*.

To better facilitate the work of clamping in the wires 8 8, a lateral-view opening 12 is made through the shell of casing 4. (See Fig. 2). Through this opening the workman is enabled to manipulate the works and parts. Said opening 12 further permits the thumb-key to be lifted and taken out to allow the

core A to be withdrawn from the casing whenever required.

The casing 4 is provided with an outer jacket 15, adapted to turn loosely on the casing 4. Said jacket is provided with an opening 20, Fig. 3. This jacket is designed for closing the opening 12 of the casing. To that end it is turned on the casing 4, so that the whole side of the jacket lies over the opening 12, as in Fig. 1. In this position it will be observed that the edges of the casing 4 and the jacket 15 lap by and form a bearing for the thumb-key, as shown. Obviously, when it is desired to look or reach through the opening 12, it is only necessary to turn the jacket 15 until its opening registers with the opening 12.

It will be understood that the contact-plates *a e* terminate at their bottom ends in flat yielding projections below the core A and in position to contact with the terminals of the lamp, all in the customary and usual manner.

I claim—

1. In a holder or socket for electric lamps, the combination, with the internal casing containing the contacts and provided with an opening through its walls to the inner mechanism, of the outer jacket or casing surrounding the inner casing, movable thereon, and having an opening registering with the opening therein, and the key journaled in the inner casing and projecting through the outer casing, substantially as described.

2. In an electric-lamp holder or socket, the combination, with the internal casing containing the contacts and provided with an opening through its walls to the inner mechanism, of the outer jacket or casing surrounding the inner casing, movable thereon, and having an opening registering with the opening therein, and the key journaled in the inner casing and projecting through said opening in the outer casing, substantially as described.

3. In an electric-lamp holder or socket, the combination, with the central core-block carrying the contacts, the guide-block having the apertures therein for the leading-in wires, and the casing surrounding said blocks, of the screw passing through the core-block and engaging the guide-block, and the thumb-key journaled in the core-block and casing, substantially as described.

4. In an electric-lamp holder or socket, the combination, with the central core-block, the contacts thereon having shoulders, with adjacent spaces into which the ends of the leading-in wires may project beyond the contacts, and the guide-block having the apertures therein for the leading-in wires, of the independent screw uniting said blocks for drawing them toward each other, whereby the ends of the leading-in wires may be passed beyond the faces of the contacts, the blocks turned to bend the wires over said shoulders, and finally the screw tightened to clamp them in contact, substantially as described.

Signed at Boston, Massachusetts, this 19th day of February, A. D. 1890.

FRANKLIN A. WELLER.

Witnesses:
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