No. 810,473. PATENTED JAN. 23, 1906.

S. E. DOANE.

ADAPTER FOR INCANDESCENT LAMP SOCKETS.

APPLICATION FILED MAR. 27, 1905.

Fig. 1.

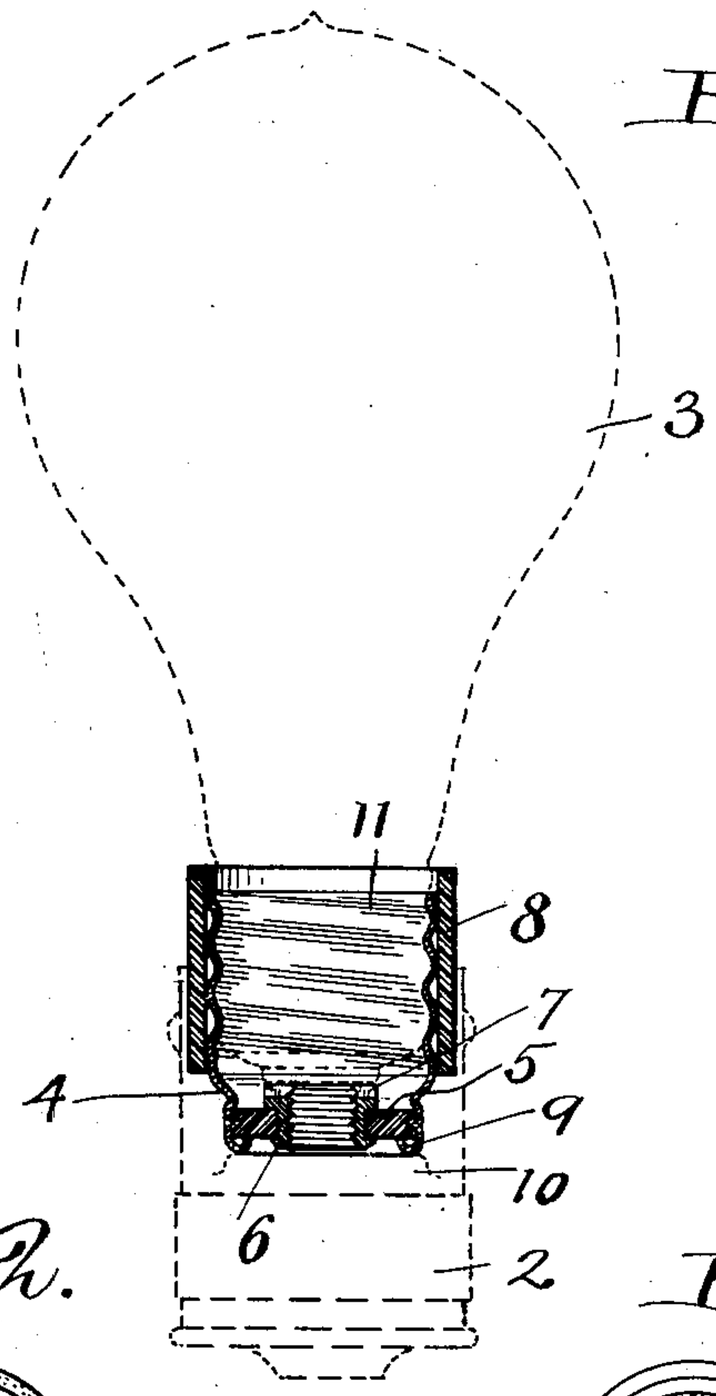


Fig. 2.

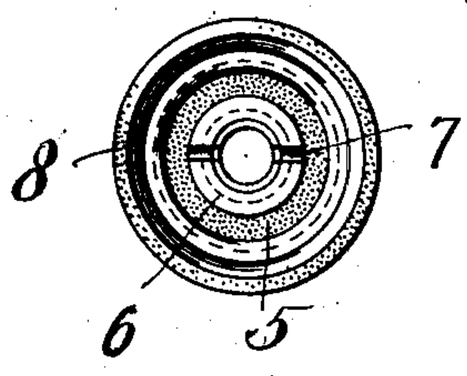


Fig. 3.

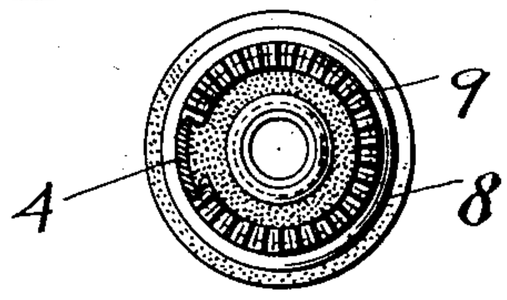
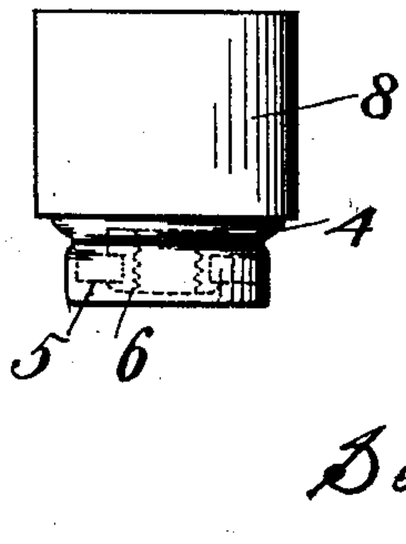


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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ADAPTER FOR INCANDESCENT-LAMP SOCKETS.

No. 810,473. Specification of Letters Patent. Patented Jan. 23, 1906.

Application filed March 27, 1905. Serial No. 252,159.

To all whom it may concern:

Be it known that I, SAMUEL EVERETT DOANE, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Adapters for Incandescent-Lamp Sockets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

In the earlier years of incandescent lighting there were a number of different types of sockets and corresponding lamps in extensive use, each socket requiring its own type of lamp. In the endeavor to put the lamps on the market as cheaply as possible a standard type has been settled upon, known as the "Edison" type, comprising a base having a screw-threaded exterior which forms one terminal and a central contact on the end of the base, which forms the other terminal. Many of the old sockets, however, remain in use, as of course expense is involved in substituting the Edison type of socket therefor. Accordingly those who have the old sockets frequently prefer to pay the higher price necessary to obtain the lamp adapted to fit the same.

The object of this invention is to provide an adapter which may be fastened in one of the old sockets and become a rigid part thereof and be able to receive the present standard lamp. The adapter shown herein is particularly designed to be used in a T. H. socket to receive the Edison lamp. Adapters from a T. H. socket to an Edison lamp are in use, comprising usually a metallic screw-threaded sleeve which receives and makes contact with the metallic base on the lamp, an insulating-diaphragm rigidly secured in the end of the sleeve, and a metallic bushing rigidly supported by the diaphragm, the bushing being provided with internal screw-threads adapted to pass over and make contact with the projecting post within the T. H. socket. This adapter may be screwed into place by taking hold of the upper end of it with the fingers. It is easier, however, to screw it first onto the lamp and use the bulb of the lamp as a handle to screw the lamp with the adapter into place. Whichever method of securing the adapter in the socket is employed, the adapter is very liable to be turned out with the lamp when it is removed for replacement by a new lamp, and it is thus very frequently lost. This invention provides an adapter which is so arranged that it will remain in the socket when the lamp is screwed out. In accomplishing tnis I make the bushing, which carries the internal screw-threads, rotatable in the adapter-sleeve, and I provide means for turning this bushing independently of the adapter-sleeve. This allows the adapter to be inserted in the socket and the bushing turned around by a suitable tool tightly onto the post, so that the adapter becomes a rigid part of the socket.

Referring to the drawings accompanying the specification, Figure 1 represents a longitudinal section of my adapter, the socket and lamp being indicated in dotted lines. Fig. 2 is an end view of the adapter as seen from the bulb. Fig. 3 is an end view, partly broken away, as seen from the socket. Fig. 4 is a side elevation.

In Fig. 1, 2 represents the receiving-socket (Shown in dotted lines.) 3 is an ordinary incandescent lamp. (Also shown in dotted lines.) 4 is the metallic sleeve of my adapter, which is designed to readily pass over and make contact with the usual metallic Edison base 11 of the lamp. The end of the sleeve is provided with a portion 9, which is designed to make contact with the terminal ring 10 of the socket-piece. The metallic sleeve 4 is provided at the end with an insulating-diaphragm 5, which supports the bushing 6. This bushing is designed to pass over the post projecting from the socket-piece 2. The diaphragm 5 must be loosely and rotatably connected with either the bushing 6 or the sleeve 4 in order to secure the purposes of my invention. Further, some means must be provided—in this instance shown as a slot in the bushing adapted to receive a screw-driver—by which one may firmly screw the bushing into position on the post. The sleeve 4 is provided on its exterior with an insulating-case 8 to protect it from contact with the socket.

It will be seen that owing to the structure and arrangement of parts described it is possible to readily apply the adapter rigidly to the socket by screwing the bushing 6 upon the socket-post until the end 9 is pressed firmly against the contact-ring 10. When screwed into place, the bushing clamps the

diaphragm 5, so that it cannot rotate, and the adapter is thus firmly held in the socket. The firmness of this holding is increased by securing the diaphragm rigidly to the sleeve, as shown in the drawings, and by roughening and corrugating the bottom edge 9 of the adapter, as shown in Fig. 3.

In the form shown in the drawings the only tool necessary to apply the adapter is an ordinary screw-driver. By means of it my adapter is at once constituted a rigid part of the socket—in effect converting the old T. H. socket into an Edison socket—while whenever it becomes desirable to remove the adapter it can easily be done with a screw-driver.

Having described my invention, I claim—

1. An adapter for incandescent lamps comprising a sleeve formed to engage a lamp-base and contact members carried thereby to engage the contacts of the socket, one of said members being rotatable independently of the other and accessible from within the sleeve and formed to allow the application of means within the sleeve for rotating such member when the sleeve is in the socket.

2. An adapter for incandescent-lamp sockets provided with a bushing adapted to fit over a post, and a sleeve adapted to receive the lamp-base, said sleeve and bushing being independently movable.

3. An adapter for incandescent-lamp sockets comprising a sleeve adapted to receive the lamp, a diaphragm within the end of the sleeve, an internally-threaded bushing supported by the diaphragm, the bushing and the sleeve being relatively movable, said bushing being formed on its outer face to allow the application of means for rotating the bushing.

4. An adapter for incandescent-lamp sockets comprising a sleeve adapted to receive the lamp and adapted to abut against a terminal ring within a lamp-socket, a diaphragm within the end of the sleeve and fixedly attached thereto, a bushing loosely supported by the diaphragm and adapted to be secured to a terminal post within the socket.

5. An adapter for incandescent-lamp sockets comprising a sleeve adapted to receive the lamp, a diaphragm within the end of the sleeve, an internally-threaded bushing supported by the diaphragm and rotatable and adapted to engage an externally-threaded terminal post within the socket, said bushing having a screw-driver slot across its upper surface.

6. In an adapter for incandescent-lamp sockets, an annular contact portion provided with a roughened surface adapted to bite into the metal of the terminal opposed thereto, and an independently-rotatable center member constituting the other terminal of the adapter.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

SAMUEL EVERETT DOANE.

Witnesses:

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