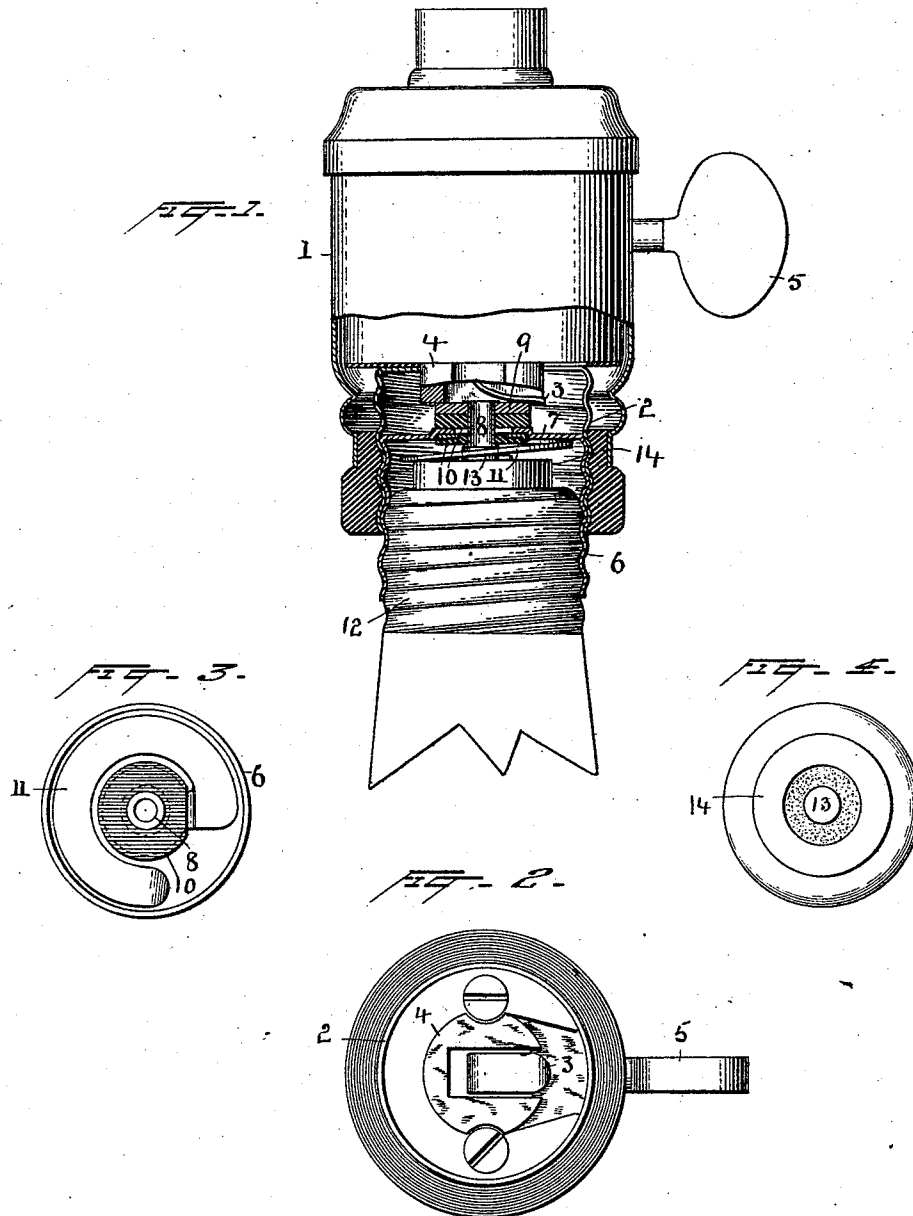


(No Model.)

H. P. BALL.
ADAPTER FOR LAMP SOCKETS.

No. 498,374.

Patented May 30, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY PRICE BALL, OF SCHENECTADY, ASSIGNOR TO THE EDISON GENERAL ELECTRIC COMPANY, OF NEW YORK, N. Y.

ADAPTER FOR LAMP-SOCKETS.

SPECIFICATION forming part of Letters Patent No. 498,374, dated May 30, 1893.

Application filed July 6, 1892. Serial No. 439,123. (No model.)

To all whom it may concern:

Be it known that I, HENRY PRICE BALL, a citizen of the United States, residing at Schenectady, county of Schenectady, and State of New York, have invented a certain new and useful Adapter for Lamp-Sockets, of which the following is a specification.

The present invention relates to devices designed to make it possible to use an incandescent lamp socket made for one type of lamp, with a different type.

The main object of the invention is to provide means by which sockets of the well-known Edison type may be used without modification in connection with lamps having screw-threaded insulating necks with two terminals on the end thereof, and not having one terminal in the form of a screw-threaded metal sleeve surrounding the neck, as in the common form of Edison lamp.

The invention consists in an adapter for Edison sockets, of such construction that it can be inserted into such a socket, and will extend the terminals thereof so as to co-operate with a central pin terminal and a ring or edge terminal on a lamp; when a lamp with such terminals is screwed therein so as to bring its terminals near the bottom of the adapter and the invention consists also in several combinations hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a view of an Edison socket, an adapter and lamp, the lower part of the socket being broken away and the adapter being in section. Fig. 2 is an end view of the socket, looking into the sleeve terminal. Fig. 3 is an end view of the adapter looking into the open end; and Fig. 4 is an end view of the lamp.

In the common form of Edison lamp, the neck is provided with a screw-threaded sleeve, to which one end of the filament is connected, said sleeve being adapted to be screwed into a screw-threaded sleeve in a socket and to make electrical contact therewith; such lamp has also a central plug or terminal connected to the other end of the filament and adapted to make contact with a central plug or spring in the socket to complete the circuit. It has recently been proposed to do away with the

screw-threaded metal sleeve on the neck of the lamp, and to form a screw-thread in the glass of the neck, for example, by blowing the neck into a screw-threaded mold, and to attach the two lamp terminals directly to the end of the neck of the lamp, but not having one surrounding said neck as heretofore. Obviously, lamps of this construction cannot be used in the old form of Edison socket now in extensive use, since there is no terminal on the new form of lamp to co-operate with the screw-threaded sleeve of the socket. By the present improvement, means are provided by which the sockets are adapted to receive said new form of lamp.

In the drawings, 1 indicates an ordinary form of Edison socket, having a screw-threaded metal sleeve 2, which is designed to be connected to one circuit wire, and a central terminal 3 to be connected to a second circuit wire, this terminal, in the present case, being shown as a spring resting in a recess in the insulating body 4, but which, by the key 5, can be moved toward and from the central terminal of a lamp when the latter is in the socket.

6 is a screw-threaded metal sleeve, of such size that it will screw into the sleeve 2 and make good electrical connection therewith. This sleeve forms the body of my adapter. One end of this sleeve is turned in, as indicated at 7, but has a central opening, within which is a metal eyelet or rivet 8, passing through the metal plate or washer 9 and the two insulating washers 10, one of which lies between the metal washer 9 and the edge of the flange 7 to insulate said parts, as clearly shown.

To the flange 7, on the inside of the sleeve, is secured a contact device, such as a spring 11, adapted to bear against a lamp terminal directly on the end of the lamp neck. The spring, which has an enlarged end with a hole larger than the central rivet, is shown clamped between flange 7 and one of the washers 10. 12 is a lamp, having a screw-thread formed in its glass neck.

13 is a central pin or terminal, and 14 is a ring or edge terminal concentric therewith, connected respectively to opposite ends of the

lamp filament. By placing the contact 11 as well as 8 at or near the bottom of the sleeve, that is, at a distance below the top of the sleeve sufficient to allow the insulating lamp-neck to be screwed into the sleeve, the lamp can be screwed into said adapter and held in place without difficulty.

The mode of using the devices described is as follows:—When a lamp, 12, is to be used with an old socket having a screw-threaded sleeve, the adapter is screwed into said socket sleeve until the disk 9 rests against the central socket terminal, or directly over it, if the socket key is in its open position, and the lamp is then screwed into the adapter, the glass neck being sufficiently small to enter the same, until the pin 13 makes contact with the eyelet or rivet 8, and until the ring 14 makes contact with the spring within the adapter, which practically forms an extension of the socket sleeve terminal.

I do not limit myself to just the form of contact devices described in the adapter, since these may be varied without departing from my invention.

I consider it broadly new to provide a screw-threaded sleeve adapter with contacts so formed or located at or near the bottom thereof as to co-operate with two end contacts on a lamp having an insulating neck.

What I claim is—

1. An adapter for sockets, consisting of a screw-threaded conducting sleeve, having in it at or near its bottom two contacts insulated from each other and in position to co-operate with two terminals directly on the end of a

lamp when the latter is screwed into the adapter, substantially as described.

2. An adapter for sockets, consisting of a screw-threaded sleeve, having at or near its bottom a central insulated contact and an edge contact spring in metallic connection with the screw-threaded sleeve, both contacts being in position to make contact with terminals on the end of a lamp when the latter is screwed into the adapter, substantially as described.

3. The combination, in an adapter, of a screw-threaded sleeve, an interior edge contact, and a central contact, consisting of an insulated eyelet or rivet, to the outer end of which is connected a metal disk or washer, substantially as described.

4. The combination, in an adapter, of a screw-threaded sleeve having an inwardly turned flange at one end, insulating washers clamping said flange, and a central insulated contact, carried by said insulating clamping washers and insulated thereby from the sleeve, substantially as described.

5. The combination, in an adapter, of a screw-threaded sleeve having an inwardly turned flange at one end, a central contact, insulating washers 10, 11, and a metal disk or washer connected to the central contact, substantially as described.

This specification signed and witnessed this 1st day of July, 1892.

HENRY PRICE BALL.

Witnesses:

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