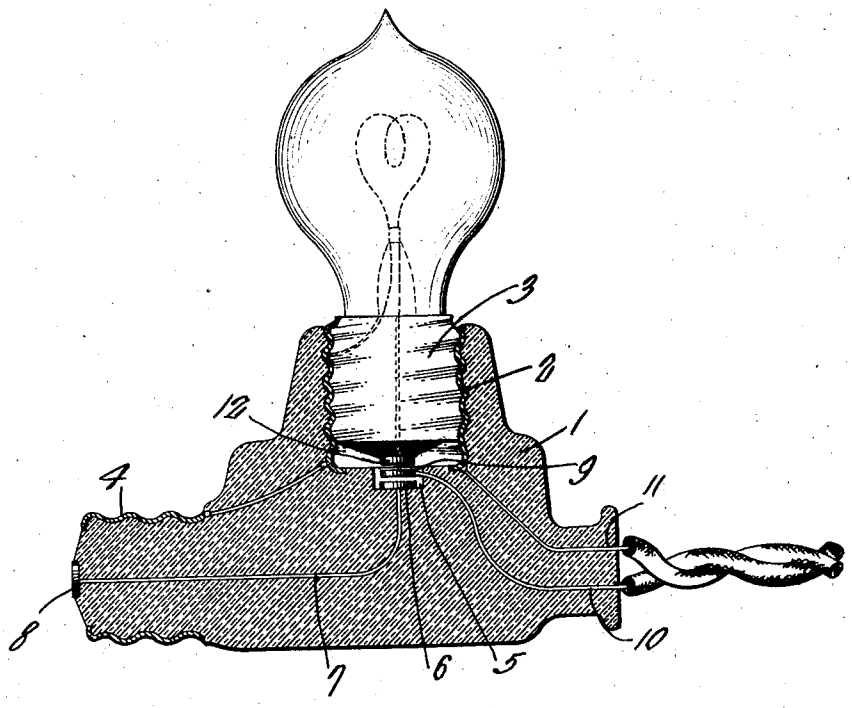
R. T. SMITH.

ELECTRIC CONTACT AND INDICATOR.

APPLICATION FILED DEC. 18, 1912.

1,078,172.

Patented Nov. 11, 1913.



Witnesses

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UNITED STATES PATENT OFFICE.

RALPH T. SMITH, OF RENO, NEVADA.

ELECTRIC CONTACT AND INDICATOR.

1,078,172. Specification of Letters Patent. Patented Nov. 11, 1913.

Application filed December 18, 1912. Serial No. 737,568.

To all whom it may concern:

Be it known that I, RALPH T. SMITH, a citizen of the United States, residing at Reno, in the county of Washoe and State of Nevada, have invented a new and useful Electric Contact and Indicator, of which the following is a specification.

This invention relates to an electric contact and indicator particularly designed for use in connection with electrical appliances such as irons, toasters, heaters and the like. Heretofore, where such devices have been used, it has been customary to place at a suitable point in the circuit, a lamp which, while the current is turned on, is illuminated, thus constituting a means for indicating visually whether or not the current is turned on. Devices of this type such as commonly employed, however, have been found objectionable for the reason that the lamps are often removed carelessly for use at other points and the circuit is thus left without any means for visually indicating whether or not the current is turned on. As a result a considerable waste of current often occurs, and furthermore, there is considerable danger of the overheated article igniting adjacent objects.

One of the objects of the present device is to so arrange the indicating lamp that, when the same is entirely or partly removed from its socket, the current to the appliance in circuit will be cut off.

Another object is to provide a lamp which will be illuminated when in position, as long as a current is being directed into the appliance.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawing, which is a view partly in section and partly in elevation of the device one form of the invention has been shown, the wiring being shown more or less in diagram.

Referring to the drawing by characters of reference 1 designates a socket of the usual or any preferred construction, the same being provided preferably with a metallic threaded lining 2 designed to be engaged by the plug 3 of an incandescent lamp. One end of the socket 1 is provided with a screw plug 4 which, in the structure shown, is electrically connected to the lining 2. A recess 5 is formed in the inner end of the socket 1 and arranged within this recess is a contact plate 6 electrically connected, as by means of a wire 7, to a contact 8 formed in the outer end of the plug 4. A spring contact 9 is supported within the recess 5 and is electrically connected to one wire of the circuit leading to the appliance, while the other wire of said circuit is attached to the lining 2. These two wires have been indicated at 10 and 11 respectively.

It is to be understood that the parts are so proportioned that, when the lamp is screwed into the lining 2 to its greatest extent, the contact 12 at the end of the plug 3, will bear against the spring contact 9 and force it inwardly against the contact 6. Thus a circuit will be established from the socket 4 through the lining 2 to the wire or other conductor 11, thence from the appliance back through the conductor 10 and the contacts 6 and 9 to the contact 8. A portion of the current will enter the lamp and illuminate it. If, however, the lamp is partly or entirely removed from its socket, the contact 12 shifts away from the contact 9 and said contact 9, in turn, springs away from the contact 6, thus breaking the circuit both to the lamp and to the appliance to which the conductors 10 and 11 are connected. Obviously, therefore, the appliance to which the conductors are connected cannot be used unless a lamp is located in the socket and, when the lamp is thus positioned, it will accurately indicate whether or not the current to the appliance is turned on.

What is claimed is:—

1. The combination with a socket having a lining of conductive material, of a plug electrically connected to said lining, a contact within the inner end of the socket, a second contact carried by the plug and electrically connected to the first named contact, a movably supported contact within the socket, means for electrically connecting said movably supported contact and the lining to an appliance, and a lamp plug insertible

into the lining for engaging the movable contact and forcing it against the other contact in the socket.

2. The combination with a socket having a conductive material therein for engagement by the plug of a standard lamp, of a plug electrically connected to said material, a contact carried by the last named plug, normally spaced fixed and movable contacts within the inner end of the socket, an electrical connection between one of said contacts and the contact in the last named plug, means for electrically connecting the other one of the contacts in the socket and the material in said socket to an appliance, the movably supported contact being adapted to be engaged by the lamp plug and forced thereby against the fixed contact in the socket.

3. The combination with a socket having a lining of conductive material for engagement by the plug of a standard lamp, of a plug electrically connected to said lining, a contact within the inner end of the socket, a second contact carried by the plug and electrically connected to the first named contact, a movably supported contact within the socket and adapted to be engaged by the lamp plug and forced thereby against the other contact in the socket, and means for electrically connecting the movably supported contact and the lining to an appliance.

4. The combination with a plug for engaging a lamp socket, and separate conductors carried by the plug, of a lamp plug receiving socket in circuit with one of said conductors, and normally spaced contacts in circuit with the other conductor, one of said contacts being adapted to be engaged by a contact of the lamp plug and to be shifted thereby against the other contact to complete a circuit through the lamp and through the conductors.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

RALPH T. SMITH.

Witnesses:
CHESTER V. SAVAGE,
CLARA B. ADRIAN.