Feb. 22, 1949. J. B. MILLER 2,462,530

LIGHT BULB STEM AND SOCKET

Filed Sept. 4, 1947

Fig. 1.

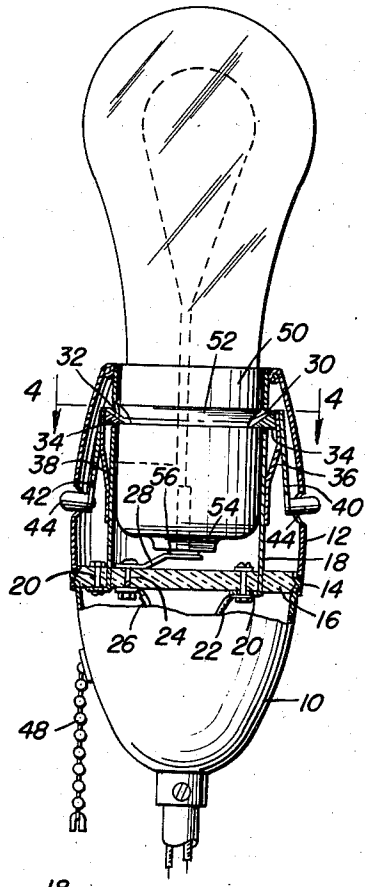
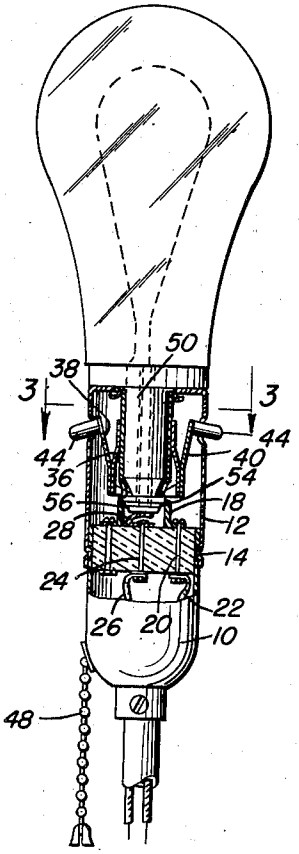


Fig. 2.



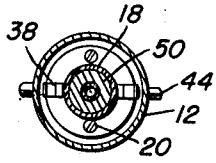
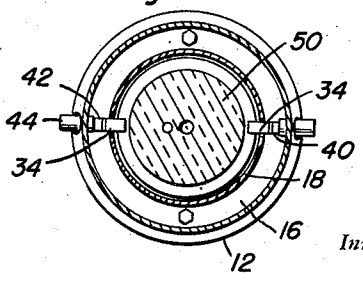


Fig. 3.

Fig. 5.

Fig. 4.



Inventor

Joseph B. Miller

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Feb. 22, 1949 2,462,530

UNITED STATES PATENT OFFICE

2,462,530

LIGHT BULB STEM AND SOCKET

Joseph B. Miller, Natchez, Miss., assignor of fifty per cent to Katherine G. Miller, Natchez, Miss.

Application September 4, 1947, Serial No. 772,193

2 Claims. (Cl. 173—328)

1

This invention relates to novel and useful improvements and structural refinements in devices for quickly, easily and efficaciously making and breaking electrical connections such as in conjunction with light bulbs, outlet plugs, sockets and the like.

An object of this invention is to very simply and quickly attach and detach a light bulb or th like in a socket.

Another object of this invention is to provide means for carrying out the above mentioned function.

A still further object of this invention is to provide resiliently biased latch keepers cooperating with apertures in a sleeve member for engaging the groove in the stem projecting from a light bulb, plug or the like.

Another object of this invention is to provide an extremely simple, easily operative device which obviates the necessity of turning a bulb relative to the socket for making electrical contact.

Other objects and features of novelty will become apparent as the description proceeds, when taken in conjunction with the embodiments of the invention, illustrated in the accompanying drawings, wherein:

Figure 1 is an elevational view of one form of the present invention, parts being shown broken in section to illustrate details of construction;

Figure 2 is a slightly modified form of the invention shown in Figure 1;

Figure 3 is a transverse sectional view of the invention shown in Figure 2 and taken substantially on the line 3—3 thereof and in the direction of the arrows;

Figure 4 is a transverse sectional view of the invention shown in Figure 1 and taken substantially on the line 4—4 thereof and in the direction of the arrows, and

Figure 5 is an exploded perspective view of the lamp and socket used in conjunction with the present invention.

Referring now in detail to the illustrated preferred forms of the invention, like reference characters are used throughout to indicate similar elements thereof.

This invention has been evolved for the purpose of efficaciously and quickly attaching and detaching light bulbs, plugs and the like in a socket. As is well-known, it is necessary to turn a conventional light bulb relative to its associated socket for the purpose of removing or installing the bulb. By utility of the present invention, however, to remove the said light bulb from its

2

associated socket it is only necessary to urge or squeeze appropriate members and lift the bulb from the socket.

There is provided a housing composed of detachable sections 10 and 12 respectively which may utilize snap fastening means 14 for securing purposes. An insulating partition 16 extends across the said housing and is provided with apertures therein.

A sleeve 18 is secured to the said partition 16, utilizing a selected number of the said apertures for extending bolts or screws 20 therethrough. A predetermined screw 20 has a conductor 22 secured thereto, thereby placing the said sleeve 18 in an electrical circuit.

Another screw 24 extends through the said insulating partition 16 and has the second conductor 26 associated therewith. This second conductor is also electrically connected with a resilient contact 28 which is positioned on the said partition and within the bore of the said sleeve 18.

Aligned apertures 30 and 32 respectively are provided in the said sleeve 18 and latch keepers 34 extend therethrough. The latch keepers are resiliently secured to a cantilever means 36 and 38 respectively which are resilient in nature. Rods 40 and 42 respectively are rigidly secured to the said cantilever means 36 and 38 and insulating handles 44 are positioned at the terminal portions of each of the said rods 40 and 42. These insulating handles project through suitable apertures provided in the housing element 12 and are adapted to be actuated by the fingers of an individual.

A suitable switch, conventional in nature, may be provided within the said housing element 10 and an actuating pull-chain (or switch-button) 48 is associated therewith.

The above described socket is adapted to be utilized in conjunction with plugs, light bulbs and the like which have a stem 50 extending therefrom. This stem is provided with a groove 52 extending peripherally therearound. It will be noted that the latch keepers 34 are engageable with this groove 52 for locking purposes. It is also quite apparent that since the sleeve 18 is in the electrical circuit, so is the stem 50 likewise in this circuit. An insulating member 54 is secured at the lower portion of the said stem 52 while a second electrode projects through this insulating member 54. It will be noted that the said second electrical conducting means is seen at 56 and seated on the resilient contact 28.

While there is described and illustrated only

the preferred forms of the invention, it is apparent that various changes may be made without departing from the spirit thereof. Accordingly, limitations are sought only in accordance with the scope of the following claims.

Having described the invention, what is claimed as new is:

1. A socket for a lamp having a grooved stem extending therefrom comprising a housing composed of detachable sections and having an opening at the top of one of said sections, an insulating partition in said housing, a sleeve having aligned apertures secured to said partition and extending to and terminating at said opening, a resilient contact secured to said partition and positioned within said sleeve, resilient arms secured to said sleeve, means exterior of said housing for actuating said arms and latch keepers on said arms extending through said apertures engageable with the groove in a lamp stem, a conductor secured to said sleeve and a conductor secured to said resilient contact, said actuating means comprising rods rigidly secured to said resilient arms and insulating handles secured to said rods.

2. A socket for a lamp having a grooved stem extending therefrom comprising a housing composed of detachable sections and having an opening at the top of one of said sections, an insulating partition in said housing, a sleeve having aligned apertures secured to said partition and extending to and terminating at said opening, a resilient contact secured to said partition and positioned with said sleeve, resilient arms secured to said sleeve, means exterior of said housing for actuating said arms and latch keepers on said arms extending through said apertures engageable with the groove in a lamp stem, a conductor secured to said sleeve and a conductor secured to said resilient contact, said actuating means comprising rods rigidly secured to said resilient arms and insulating handles secured to said rods, said latch keepers comprising wedges having the apex portions thereof extending toward each other.

JOSEPH B. MILLER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
298,143	Weston	May 6, 1884