May 10, 1938. G. R. CHADSEY 2,117,017

TOOL FOR MANIPULATING ELECTRIC LAMP BULBS

Filed Dec. 1, 1937

Fig. 1.

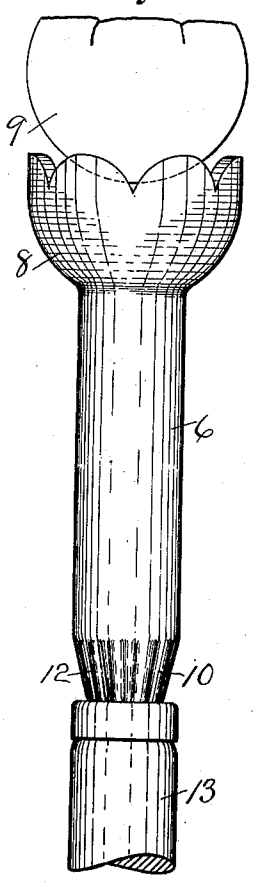


Fig. 3.

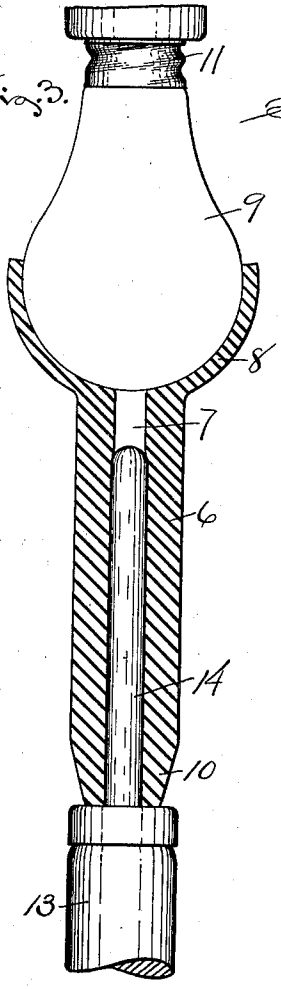


Fig. 4.

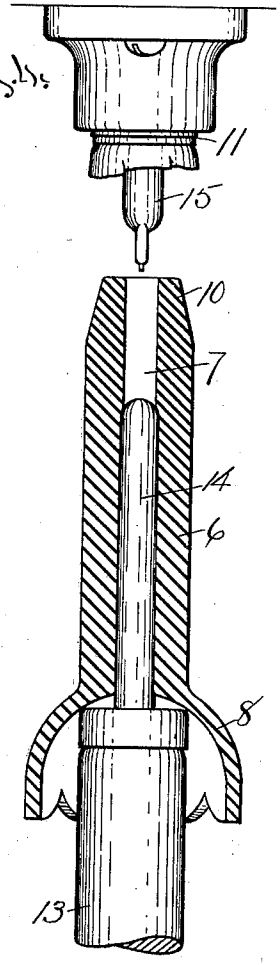


Fig. 2.

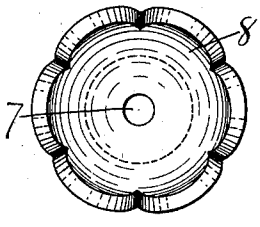


Fig. 5.

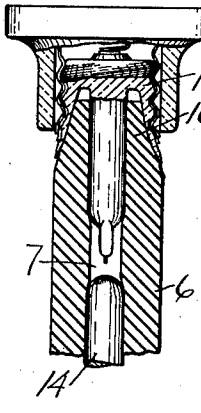
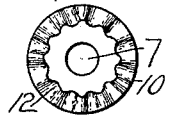


Fig. 6.



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TOOL FOR MANIPULATING ELECTRIC LAMP BULBS

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Application December 1, 1937, Serial No. 177,422

7 Claims. (Cl. 294—20)

My invention relates to the class of devices above named, and an object of my invention, among others, is to provide a device of this kind that shall be simple in construction and particularly efficient in operation.

One form of a device embodying my invention and in the construction and use of which the objects herein set out, as well as others, may be attained is illustrated in the accompanying drawing in which—

Figure 1 is a view in side elevation of my improved electric lamp bulb manipulating tool.

Figure 2 is an end view of the tool.

Figure 3 is a view in lengthwise central section through the tool illustrating its manner of use for application to a bulb.

Figure 4 is a similar view illustrating the tool as about to be applied to a broken bulb.

Figure 5 is a view similar to Fig. 4 but showing the lamp socket in section and the tool applied to a broken bulb.

Figure 6 is a view of that end of the tool opposite to that shown in Fig. 2.

Means employed for illuminating purposes at the present time involve the use of incandescent lamp bulbs in elevated positions out of reach and requiring the use of step-ladders or special tools for affixing the bulbs and for removing and replacing broken or burned out bulbs as well as for changing bulbs for various purposes. I am aware that tools have been employed for such purposes but such tools have lacked the possibility of meeting all of the conditions that may arise in such cases. It is therefore my aim to provide a tool which will meet all of such conditions and which may be effectually used for attachment to bulbs to affix or remove them, whether the bulb be broken or not, such tool being shown in the accompanying drawing in which the numeral **6** denotes the shank or body of the device that is preferably round in cross section and that is preferably composed of rubber or other flexible elastic material having the characteristics of such rigidity as to effect its purpose but which at the same time shall be sufficiently soft to stretch or yield and to exert a clinging or gripping action on a bulb when engaged with it. A hole **7** is formed through this shank and a bell-shaped gripper **8** is preferably integrally formed at one end thereof, this gripper being of a size to receive lamp bulbs **9**.

The opposite end **10** of the shank is formed to engage within the socket or shell **11** of an electric lamp when the bulb has been broken, as shown in Figs. 4 and 5, the filament support **15** of the bulb being entered into the hole **7** at this end of the shank, which hole is somewhat smaller than the filament support but which will stretch to receive it and then exert a gripping action on it by reason of its elasticity. This end of the tool is also tapered, as shown, so that it may be forced into the socket, as shown in Fig. 5, the elasticity of the material exerting a yielding contact to enable this end to be forced into the socket and to exert a gripping hold on the inside of the broken part of the bulb. This tapered end is also corrugated, providing ribs **12** to enable a firm grip of this end of the tool within the socket of the broken bulb.

A handle **13** is provided of a length to enable the tool to be engaged with bulbs at such heights as may be desired, this handle having a pin **14** to be entered into the hole **7** of the shank or body. This pin is somewhat larger than said hole so that when it is forced into the hole a gripping action will be exerted on the pin owing to the elasticity of the material of the body.

In affixing an unbroken bulb the shank **6** is placed upon the pin with the bell-shaped gripper at the outer end and the bulb is placed within the gripper which is caused to adhere thereto. The tool being now raised to proper position the lamp may be readily screwed into the socket. If an unbroken bulb is to be removed the tool is affixed to the pin in the same manner and is raised to engage the bulb. Pressure upwardly on the handle will enable a firm grip upon a lamp bulb to be obtained sufficient to readily effect its removal.

If the bulb be broken then the tool is placed upon the pin in a position reversed from that just described and the tapered end **10** may be thrust into the socket of the broken bulb and into the broken portion of the bulb, as shown in Figure 5. In this case the handle **13** is forced upwardly and the filament support **15** is engaged within the hole **7** in the shank or body **6** and the tapered and ribbed end **10** is forced into the socket **11** of the lamp, the elasticity of the rubber causing an effective grip upon the broken lamp parts sufficient to enable them to be readily removed.

In accordance with the provisions of the patent statutes I have described the principles of operation of my invention, together with the device which I now consider to represent the best embodiment thereof; but I desire to have it understood that the device shown is only illustrative and that the invention may be carried out by other means and applied to uses other than those above set out.

I claim:

1. A tool for manipulating electric lamp bulbs and comprising a shank having a hole extending inwardly from each end, a bell-shaped gripper at one end of said shank, a broken bulb remover at the opposite end thereof, and a handle having a pin formed for insertion in either end of said shank.

2. A tool for manipulating electric lamp bulbs and comprising a shank having a hole extending inwardly from each end, a bell-shaped gripper at one end of the shank, a broken bulb remover at the opposite end of the shank and comprising said hole arranged to receive and grip the filament support of a lamp, and a handle having a pin formed for insertion in either end of said shank.

3. A tool for manipulating electric lamp bulbs and comprising a shank having a hole extending inwardly from each end, a bell-shaped gripper at one end of the shank, a broken bulb remover at the opposite end of the shank and comprising a tapered end shaped for insertion within a lamp socket or broken bulb, and a handle having a pin formed for insertion in either end of said shank.

4. A tool for manipulating electric lamp bulbs and comprising a shank having a hole extending inwardly from each end, a bell-shaped gripper at one end of the shank out of which said hole opens, a broken bulb remover at the opposite end of the shank shaped to engage a lamp socket or broken bulb, and a handle of a size for location of its end within said bell-shaped gripper and having a pin projecting therefrom and shaped for insertion in either end of said shank.

5. A tool for manipulating electric lamp bulbs and comprising a shank composed of elastic material having a hole extending inwardly from each end thereof to exert a grip upon a pin thrust therein, a bell-shaped gripper composed of elastic material to exert a grip upon a lamp bulb and located at one end of the shank, a broken bulb remover of elastic material at the opposite end of the shank, and a handle having a pin projecting from its end and formed for insertion in either end of the hole in said shank.

6. A tool for manipulating electric lamp bulbs and comprising a shank having a hole extending through it from end to end, a bell-shaped gripper at one end of the shank, a tapered ribbed end at the opposite end of the shank, and a handle having a pin projecting from its end larger than said hole and formed for insertion in one end thereof for support of said tool by said handle.

7. A tool for manipulating electric lamp bulbs and comprising a shank having a hole extending therethrough from end to end, a bell-shaped gripper composed of elastic material at one end of the shank from within which said hole opens, a broken bulb remover composed of elastic material at the opposite end of the shank shaped to engage a lamp socket or broken bulb therein, and a handle adapted for insertion in said bell-shaped gripper and having a pin larger than said hole and projecting therefrom for entry into either end of said hole for support of the remover by said handle.

GEORGE R. CHADSEY.