Oct. 21, 1969 E. V. PECK 3,473,423

BULB REMOVER DEVICE

Filed May 27, 1968

FIG. 1.

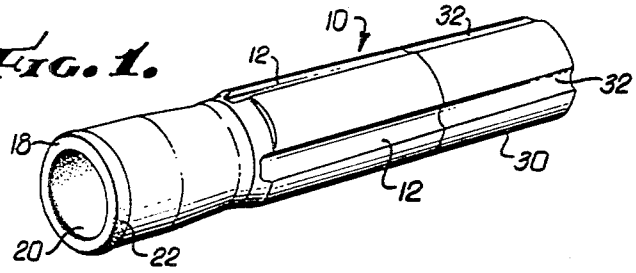


FIG. 2.

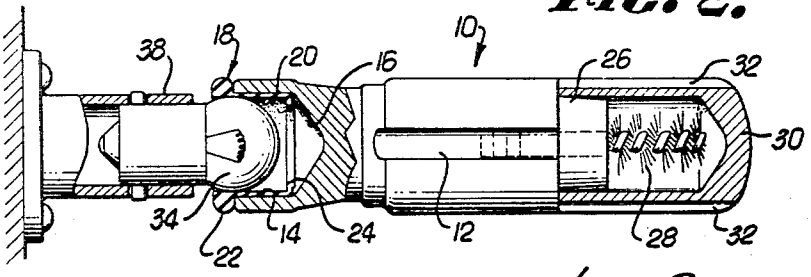


FIG. 3.

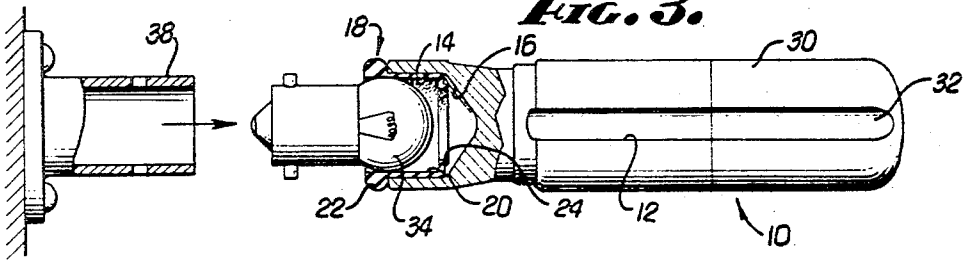


FIG. 4.

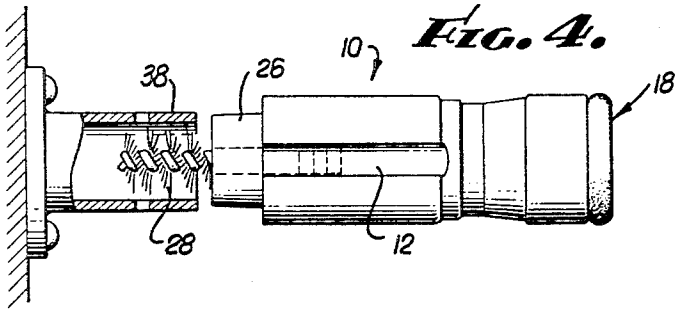
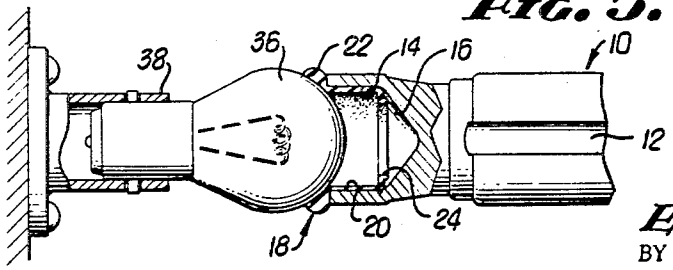


FIG. 5.



INVENTOR
ELMER V. PECK
BY
John Joseph Hill
ATTORNEY.

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BULB REMOVER DEVICE

Elmer V. Peck, 15421 Hartsville St.,
La Puente, Calif. 91744

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U.S. Cl. 81—64 2 Claims

ABSTRACT OF THE DISCLOSURE

A bulb remover device which provides a cup means for ease in unscrewing and removing bulbs of various kinds of the type used in automobile headlight and taillight sockets, together with a handle for easy use.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to a new type of bulb remover device which has been adapted for use in unscrewing and removing bulbs of the type used in automobile headlight and taillight sockets.

Prior art

Applicant knows of no construction similar to his invention herein, although there have been various types of devices for unscrewing and removing light bulbs of various kinds.

SUMMARY OF THE INVENTION

The invention comprises a new type bulb remover device which provides both a vacuum and friction means to unscrew and remove bulbs in vehicles having headlight and taillight socket. The invention also includes an optional cleaning means which may be enclosed within the handle of the device.

Vehicles such as automobiles have numerous light bulbs for various purposes such as headlights, taillights, and dashboard lights. It is common knowledge that such light bulbs are often difficult to remove from their sockets even after a brief period of use because the metal portion of such bulbs easily corrodes and sticks to the socket. The socket itself is also subject to corrosion. Accordingly, in the process of attempting to unscrew such bulbs which have burned out, induviduals may easily break the glass portion of the bulb, not only cutting themselves, but making the base portion of the bulb much more difficult to remove from the socket after the glass portion of the bulb has been broken.

Thus, there is a substantial need for a device which will provide a simple and convenient means for safely and easily unscrewing and removing such bulbs from sockets in vehicles. Of course, my invention may be used in any application where this type of problem is met, not only in automobiles and other vehicles.

It is therefore an object of my invention to provide a device which is capable of being easily used by a person to unscrew and remove light bulbs from sockets, particularly in vehicles.

Another object of my invention is to provide a device which can be used immediately and without the need of any modification, to unscrew and remove various sizes of light bulbs, particularly of the type used in vehicles.

A further object of my invention is to provide a bulb removal device which provides means for cleaning the sockets from which a light bulb is unscrewed and removed.

A still further object of my invention is to provide a device capable for use for the foregoing purposes and which is relatively easy to manufacture, assemble, and use.

These and other objects will be more readily understood by reference to the following description and claims, taken

in conjunction with the accompanying drawing forming a part hereof in which

FIGURE 1 is a perspective view of one embodiment of my invention.

FIGURE 2 is a side elevational view of FIGURE 1 showing the bulb remover device in use.

FIGURE 3 is similar to FIGURE 2 except that the bulb is shown removed from its socket.

FIGURE 4 illustrates the cleaning means of the bulb remover device in use in a bulb socket.

FIGURE 5 is a view showing my bulb remover device in use on a bulb of larger size than the bulb in FIGURE 2.

With reference to the drawing, my invention comprises a handle member **10**, preferably formed in the shape of a cylinder, and provided with a series of longitudinal grooves **12** in its outer circumference for ease in gripping.

One end of the handle **10** is formed into a socket **14** having a concave bottom **16** which receives a vacuum cup **18**. The handle **10** may be made out of any suitable material, such as plastic, metal, wood, or similar materials. The vacuum cup **18** can be made of any suitable resilient material, such as plastic, or natural or synthetic rubber.

The side walls **20** of the vacuum cup **18** are formed to closely fit the inside contour of the socket **14**. The top of the side walls **20** has an outwardly projecting flange **22** having a circumference approximately equal to the slightly flared end of the handle **10** which terminates in the socket **14**. The bottom of the sidewall **20** of the vacuum cup **18** is formed into an inwardly projecting lip **24**.

The other end of the handle **10** has a reduced portion **26** which terminates in a cylindrical wire brush **28** having a diameter slightly less than the reduced portion **26**. A cover member **30** fits over the reduced portion **26** and has longitudinal grooves **32** on its outer circumference which register with the grooves **12** of the handle **10**.

The bulb remover device may omit the cylindrical wire brush **28**, so that the handle may be more or less solid throughout, since the wire brush **28** is optional.

To illustrate the actual use of my invention, light bulbs **34** and **36** are respectively shown in socket **38** in FIGURES 2 through 5 of the drawings.

In operation, a person may grasp the handle **10** of the bulb removal device with his hand and then bring the socket end having the vacuum cup **18** immediately adjacent to the light bulb desired to be removed. As shown in FIGURE 2 of the drawing, the vacuum cup **18** receives the glass portion of the light bulb **34** and firmly grips it so that the action of both friction and vacuum permits easy rotation of the light bulb **34**, which is then easily unscrewed and removed. The socket **38** may then be cleaned of corrosion by any suitable means, such as the action of the wire brush **28** if the attachment is contained within the handle **10**.

For light bulbs larger than the light bulb **34**, such as the light bulb **36** in the drawings, the flange **22** of the vacuum cup **18** provides a friction fit around the tip of the bulb **36** so that upon applying hand pressure from the handle **10** in a horizontal direction against the tip of bulb **36**, the bulb **36** may be rotated easily and unscrewed and removed. Again as in the case of the light bulb **34**, the socket **38** may then be cleaned of corrosion by any suitable means, such as the wire brush **28**.

Although I have described my invention in detail with reference to the accompanying drawing illustrating a preferred form of my invention, it is understood that numerous changes in details of construction and arrangement of parts may be made.

I claim:

1. In a bulb remover device of the type having a handle member at one end, the improvement comprising a cylindrical cavity formed in the other end of said handle member, a resilient cup member having cylindrical side walls insertable inside said cavity and placed in said

cavity and having an outer flange member extending around the outer portion of the cup member, said flange member being adapted for engaging and gripping the outer bulb portion of a bulb whereby rotation of the bulb remover device produces a corresponding rotation of the bulb to unscrew and permit removal of the bulb.

2. A bulb remover device comprising:

a handle member at one end;

a cavity formed in the other end, said cavity having a concave bottom and cylindrical side walls;

a resilient cup member having cylindrical side walls insertable inside said cavity and formed to fit the inside contour of the cylindrical side walls of said cavity;

an inwardly projecting lip formed at the bottom of said cylindrical side walls of said cup member; and

an outwardly projecting flange formed at the top of said cylindrical side walls of said cup member for engaging and gripping the outer bulb portion of a bulb, whereby rotation of the bulb remover device produces a corresponding rotation of the bulb to unscrew and permit removal of the bulb.

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JAMES L. JONES, JR., Primary Examiner

U.S. Cl. X.R.

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