Sept. 5, 1933. W. J. GEIGER ET AL 1,925,986

ELECTRIC LAMP OR SIMILAR DEVICE

Filed Nov. 25, 1932

Fig. 1

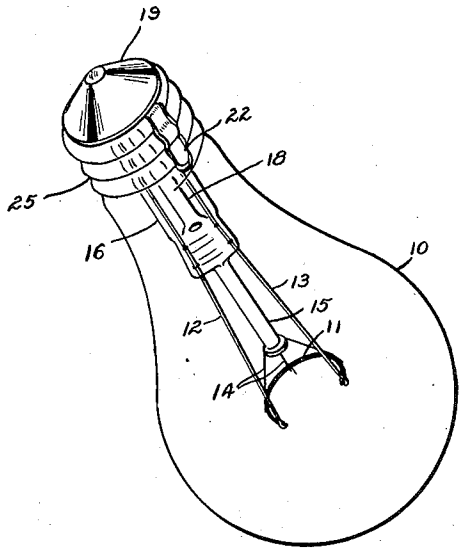


Fig. 2

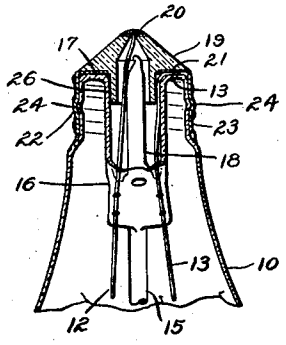
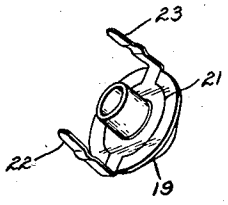


Fig. 3



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UNITED STATES PATENT OFFICE

1,925,986

ELECTRIC LAMP OR SIMILAR DEVICE

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Serial No. 644,216

4 Claims. (Cl. 176—32)

Our invention relates to electric lamps and similar devices, and more particularly to the base portions of such devices. The principal object of our invention is to provide a base which does not require cementing to the bulb of the lamp or other device. According to our invention a contact carrying insulating cap is provided which is frictionally held by the neck portions of the bulb. The latter is preferably shaped to engage a retaining element such as a screw-threaded shell carried by the socket. Other features and advantages of our invention will appear from the following description of a species thereof and from the accompanying drawing.

In the drawing Fig. 1 is a perspective view of an incandescent lamp embodying the improved base construction of our invention; Fig. 2 is a vertical section through a portion thereof; and Fig. 3 is a perspective view of the base cap.

The lamp of our invention comprises, as illustrated, an enclosing bulb 10 within which is mounted a filament 11 which is attached to leading-in wires 12 and 13 and which is supported by wires 14 extending from stem arbor 15. The stem 16 to which said arbor is attached is provided with an outwardly extending flange 17 which is sealed to the bulb neck and with a tube 18 which is sealed off after the bulb has been either exhausted or gas filled. The outwardly extending end of leading-in wire 12 passes through the hollowed out interior of a cap 19 to a metal insert 20 in the end thereof to which it is soldered and the corresponding end of leading-in wire 13 passes between the cap and the hollow interior of the stem to a position between metal insert 21 in the cap and stem flange 17. Both metal inserts 20 and 21 are molded into the cap which is made from an insulating material such as hard rubber. The cap is fastened to the bulb 10 preferably by a plurality of fingers 22 and 23 which fit into correspondingly shaped depressions in the neck of the bulb and over protuberances 24 therein. The fingers are resilient and tend to spring inward so that they hold the cap very securely and prevent it from being easily turned or pulled off. The outer portion 25 of the bulb neck between the fingers has the screw thread contour similar to that of the metal Edison or screw base and is designed to engage the threads of a socket. When inserted into such a socket, electrical contact is made by the engagement of insert 20 with the center contact of the socket and of those portions of the fingers 22 and 23 over protuberances 24 with the threaded socket shell. Should the cap 19, through rough handling, shipping, etc., be displaced from the bulb so that leading-in wire 13 does not make perfect contact with insert 21, these parts will be drawn together when the lamp is screwed into place. The inwardly extending boss 26 transfers all side thrust received by the cap 19 to the stem 16 and also serves to separate the leading-in wires.

What we claim as new and desire to secure by Letters Patent of the United States is:

1. In an electric lamp or similar device, the combination of a bulb having leading-in wires extending from the neck portion thereof, and an insulating cap fitting in the end of said neck portion and carrying side straps of resilient conductive material engaging the outer surface of said neck.

2. In an electric lamp or similar device, the combination of a bulb having leading-in wires extending from the neck portion thereof, and an insulating cap fitting in the end of said neck portion and carrying a center contact and side straps of resilient conductive material engaging the outer surface of said neck, said center contact and at least one of said side straps being electrically connected to a leading-in wire.

3. In an electric lamp or similar device, the combination of a bulb having leading-in wires extending from the neck portion thereof, and an insulating cap fitting in the end of said neck portion and carrying a center contact and side straps of resilient conductive material engaging the outer surface of said neck, said center contact and at least one of said side straps being electrically connected to a leading-in wire, and the outer surface of said bulb neck being shaped to engage a retaining element carried by a socket.

4. In an electric lamp or similar device, the combination of a bulb having leading-in wires extending from the neck portion thereof, and an insulating cap fitting in the end of said neck portion and carrying a center contact and side straps of resilient conductive material engaging the outer surface of said neck, said center contact and at least one of said side straps being electrically connected to a leading-in wire, the outer surface of said bulb neck being shaped to engage a retaining element carried by a socket and comprising grooves for receiving said straps.

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