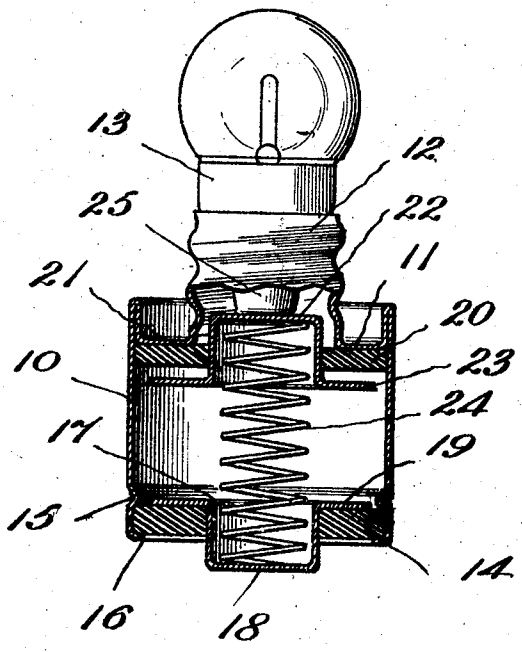
March 22, 1927. 1,621,610

S. SOKOLOW

SHOCK ABSORBING SUPPORT FOR ELECTRIC LAMPS

Filed Dec. 31, 1924 2 Sheets-Sheet 1

Fig. 1.



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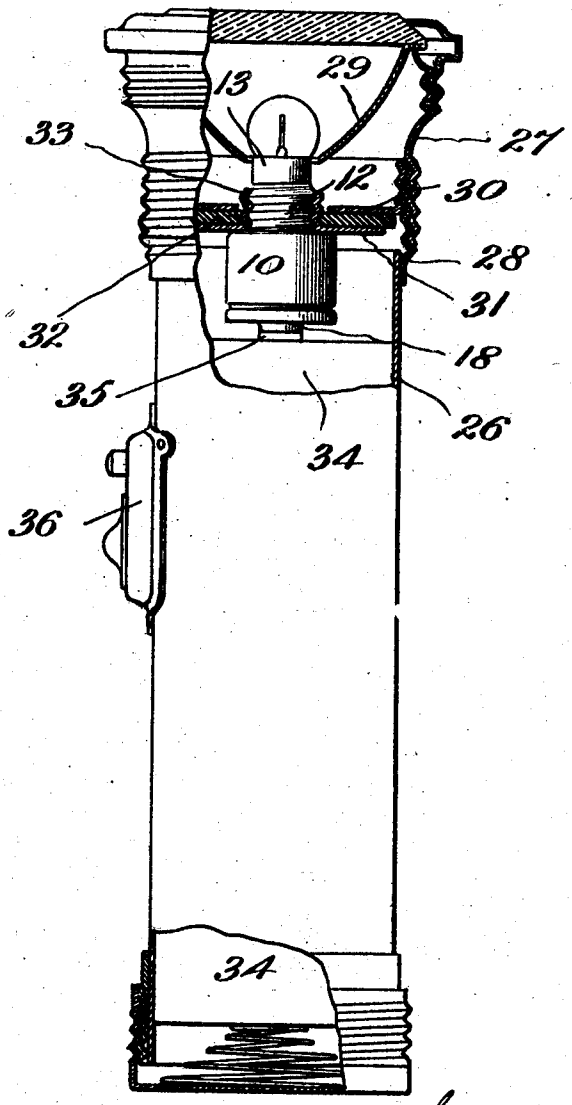
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Fig. 2.



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UNITED STATES PATENT OFFICE.

SAMUEL SOKOLOW, OF BROOKLYN, NEW YORK, ASSIGNOR TO BRIGHT STAR BATTERY COMPANY, A CORPORATION OF NEW YORK.

SHOCK-ABSORBING SUPPORT FOR ELECTRIC LAMPS.

Application filed December 31, 1924. Serial No. 759,023.

The present invention has relation to an improved shock-absorbing mounting for incandescent electric lamps. This improved mounting is intended for use in the support of incandescent electric lamps wherever they are liable to receive blows or shocks, as it provides a highly efficient, simple and reliable means for producing the necessary electric connection while at the same time preventing the transmission of injurious shocks to the bulb.

This invention finds a particularly favorable application in the mounting of small electric bulbs in portable flash lights of the type in which a battery is carried in the casing which supports the lamp; and the invention has therefore been herein illustrated and described in that specific connection. although it is to be understood that the invention is not limited in its scope to portable flash lights.

In the accompanying drawings, Figure 1 is an enlarged view of the support in vertical section, showing the electric bulb in elevation, and Figure 2 is a side elevation of one form of portable flash light partly broken away to disclose the preferred mode of carrying the shock-absorbing support within the casing.

As preferably constructed, the shock-absorbing support comprises an exterior cylindrical metallic shell 10, having a depressed flat top 11, furnished with a central threaded neck 12, into which screws in the usual manner an electric lamp bulb 13. This cylinder, with its flat top and neck, is preferably all spun from a single piece of sheet metal, as shown.

At the end of the cylinder opposite to the neck 12 is an insulating disc, 14, preferably secured in place between a circular beading 15 spun in the cylinder 10 and the inturned edge thereof shown at 16. The disc 14 has a central aperture 17 which accommodates an outwardly protruding thin movable metal cup 18, which is prevented from coming out by a flange 19 lying against the inner surface of the disc 14.

Lying against the inner surface of the flat top 11 is a second insulating disc 20 having a central opening 21, similar to 17. Through this opening there protrudes a second movable cup 22, also provided with a flange 23. A coiled spring 24 with its opposite ends within these two cups 18 and 22, tends constantly to press them apart and to hold the flanges 19 and 23 against the discs 14 and 20.

As shown in Figure 1, the upper cup 22 extends into the lower portion of the neck 12, and, when the bulb 13 is in place, its central terminal 25 makes electric contact with the top of the cup 22, pressing it slightly downward, as shown.

If, now, any exterior conducting terminal be pushed up against the outside of the cup 18, further compressing the spring 24, it is clear that there will be an electrical connection between such exterior terminal and the central bulb terminal, through the cup 18 the spring 24 and the cup 22.

One instance of a connection of this kind is found in portable electric flash lights, one form of which is shown in Figure 2.

In this figure, a well known form of fiber or similar insulating casing is shown at 26. This carries a cap 27 which screws onto a threaded shell 28 at the top of the casing, and carries a reflector 29. The shock absorbing support 10, already described, is carried by a support which comprises a threaded metal head 30, screwing into the shell 28, and a metal plate 31 attached to the head 30 but insulated therefrom by the insulating disc 32. The plate 31 has a threaded neck 33 which projects upward through a central opening in the disc 32, without touching the head 30. The neck 12 of the shock absorber screws up into this neck 33.

When the battery cells 34 are introduced in the usual manner, the topmost carbon terminal 35 is pushed up against the lower cup 18 of the connecting shock absorber as hitherto described and as shown in Figure 2.

When electric connection is made in a well known manner through the thumb-switch 36, from the lowermost zinc of the cells 34 to the plate 31, current will be thereby conveyed through neck 33, neck 12, exterior terminal of the lamp, 13, through the lamp filament, back to the central lamp terminal cup 22, spring 24, and cup 18 to the uppermost carbon terminal 35 of the battery.

The connecting shock-absorber described can be used in other well known forms of portable flash lights, whether having insulating or metallic bodies; and, as already stated, may be used in connections other than flashlights.

The duplex spring-guiding and compressing device herein described affords means

for conveying the current and at the same time preventing injurious shocks from being transmitted to the electric bulb.

What is claimed is—

1. A connecting shock absorbing support for electric lamp bulbs comprising an exterior casing, means at one end thereof for receiving a lamp bulb, a single compressible spring under the lamp bulb, a movable conducting terminal at each end of said spring, one terminal being adapted to make contact under the central terminal of the lamp bulb, and an insulating guide for each of said terminals.

2. A connecting shock absorbing support for electric lamp bulbs comprising a hollow casing having insulating ends, means at one end of the same for receiving a lamp bulb, a compressible spring under the center of the lamp bulb free to expand and contract within the hollow casing and movable conducting terminal at each end of said spring.

3. Apparatus as in claim 1 in combination with a support therefor comprising an insulating disc with a central aperture, a threaded metallic head fixed to one face of said disc, a conducting plate fixed on the other side of said disc and having a threaded neck extending up through the aperture in the disc without touching said metallic head.

In testimony whereof I have hereto set my hand on this 3d day of December, 1924.

SAMUEL SOKOLOW.