Nov. 18, 1952 G. LANGHOUT 2,618,736

ILLUMINATED KEY HOLDER

Filed Dec. 3, 1948

Fig. 1.

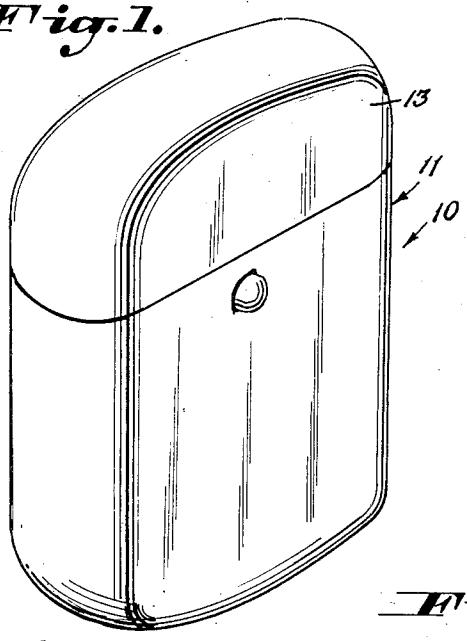


Fig. 3.

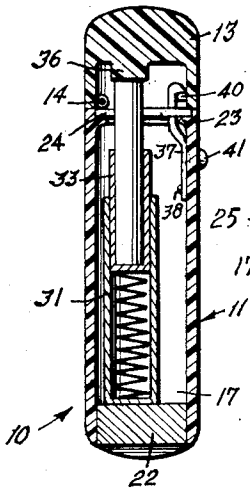


Fig. 7.

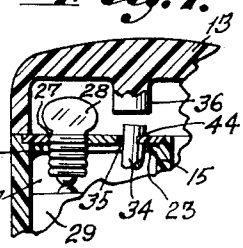


Fig. 2.

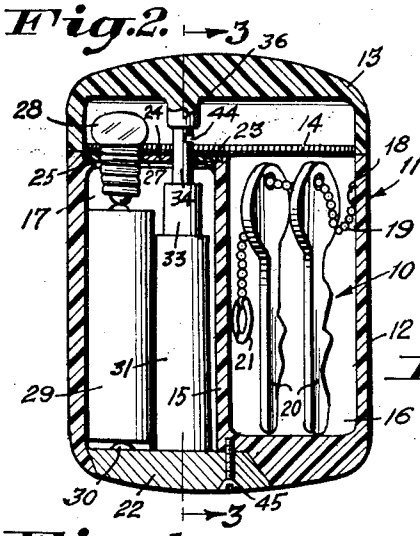


Fig. 4.

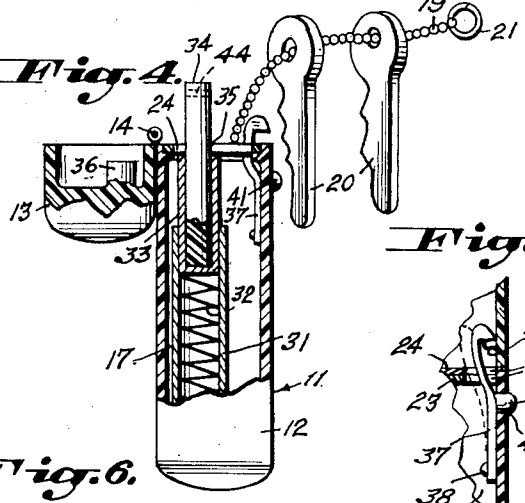


Fig. 8.

Fig. 6.

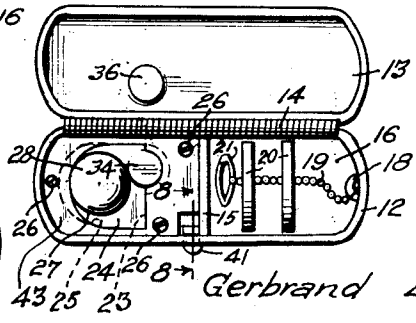
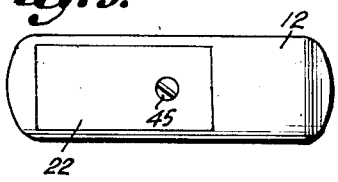


Fig. 5.



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ILLUMINATED KEY HOLDER

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1 Claim. (Cl. 240—6.4)

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This invention relates to a novel container for keys equipped with a self contained illuminating means which is automatically operated for energizing a light source thereof when the container is opened for use and which includes a spring for urging a switch element into a circuit closing position and for swinging a closure of the container into an open position when the closure is unlatched.

Another object of the invention is to provide a key container which will enable the keys to be more conveniently handled than with conventional key cases and whereby the container may be positioned so that the light rays can be directed on the keys or on a keyhole as desired.

Another object of the invention is to provide a container for keys and a self contained light source which, when closed, will exclude dirt and other particles therefrom and which can be conveniently carried in the pocket.

A further object of the invention is to provide a container of extremely simple construction to facilitate the replacement of the parts of its self contained light source and wherein various parts perform dual functions.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawing, illustrating a preferred embodiment thereof, and wherein:

Figure 1 is an enlarged perspective view showing the container of the invention in a closed position;

Figure 2 is a substantially central sectional view thereof partly in side elevation;

Figure 3 is a transverse sectional view taken substantially along a plane as indicated by the line 3—3 of Figure 2;

Figure 4 is a view similar to Figure 3 but showing the container in an open position;

Figure 5 is a bottom plan view of the container;

Figure 6 is a top plan view thereof and with the closure in an open position;

Figure 7 is a fragmentary sectional view similar to Figure 2 but showing the self contained light source latched in a circuit interrupting position, and

Figure 8 is a sectional view taken substantially along a plane as indicated by the line 8—8 of Figure 6.

Referring more specifically to the drawing, the illuminated key holder in its entirety is designated generally 10 and includes a container, designated generally 11 of rectangular cross section including a body portion 12 and a recessed lid or closure 13. As seen in Figures 1 and 2, the

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container 11 is provided with rounded corners and is of a size to conveniently fit into the pocket.

The lid 13 is swingably connected to the open upper end of the body 12 by a hinge 14 which is disposed along a side wall of each. As seen in Figure 2, the body portion 12 is provided with a transverse partition 15 dividing the container body 12 into compartments 16 and 17.

The compartment 16 is provided with a closed bottom and an open top and adjacent its upper end contains an anchoring loop 18 which is preferably secured to the innerside of an end wall of the container body 12 and to which one end of a chain 19 is anchored. The chain 19 is adapted to extend through the eyes of a plurality of keys 20 which are normally disposed within the compartment 16 and a split ring 21 is removably secured to the opposite end of the chain for normally retaining the keys thereon. It will be readily apparent that by inverting the container body 12, with the lid 13 in an open position, that the keys will readily drop out of the compartment 16 or the keys or chain may be grasped for extracting the keys and chain from said compartment with the container body 12 in an upright position as seen in Figure 4. The container body 12 is provided with a removable plate 22 forming a part of the bottom thereof and normally closing the lower end of the compartment 17. The partition 15, adjacent its upper end, is provided with a laterally extending ledge or shelf 23 which overlies a portion of the upper end of the compartment 17 to provide a support for one end of a removable cover plate 24 which normally closes the upper end of the compartment 17 and the opposite end of which rests on a ledge 25, formed on the innerside of the opposite end wall of the container body 12. Screw fastenings 26 extend through the cover plate 24 into the shelf 23 and ledge 25 for detachably retaining said plate in its applied position as illustrated.

The plate 24 is provided with an opening 27 for threadedly receiving the threaded base of a flashlight bulb 28 which extends downwardly therethrough and the base contact of which engages the positive contact of a dry cell battery 29 which is disposed in an upright position in the compartment 17 and the lower, negative contact of which rests on a projection 30 of the plate 22.

A tube 31 is disposed in an upright position in the compartment 17 beside the battery 29 and is provided with a closed lower end which rests on the plate 22 and which forms a stop for an expansion spring 32 which is contained within said tube, as seen in Figures 3 and 4. A tube 33 telescopes into the upper end of the tube 31 and is

likewise provided with a closed lower end forming a seat for the upper end of the spring 32 and for the lower end of a rod 34 which extends upwardly through the tube 33 and to substantially thereabove and which projects through an opening 35 in the plate 24. The upper end of the rod 34 normally abuts against a projection 36 of the cover 13 which extends into the recess thereof, when said cover is in a closed position, for retaining the rod 34 and tube 33 in retracted positions, as illustrated in Figures 2 and 3.

As best seen in Figure 8, a spring latch 37 has its lower end disposed in the compartment 17 and achored by a pin or fastening 38 to the front wall thereof. Said spring latch 37 extends upwardly through aligned openings 39 in the shelf 23 and plate 24 and has a hook-shaped upper end which normally engages over an internally disposed detent 40 formed on the innerside of the lid 13 for retaining said lid in a closed position and so that the rod 34 and sleeve 33 will be held retracted, as seen in Figures 2 and 3 for retaining the spring 32 in a loaded condition. A stem 41 extends from an intermediate portion of the latch 30 through an enlarged opening 42 in the front wall of the compartment 17, the outer part of which forms a push button portion adapted to be manually engaged and pressed inwardly toward the container body for moving the hook-shaped upper end of the spring latch 37 out of engagement over the detent 40 so that the lid 13 can swing on its hinge 14 to its open position as illustrated in Figures 4 and 6. It will be readily apparent that when the lid 13 is thus released the spring 32 will project the sleeve 33 and rod 34 upwardly so that the upper end of the rod 34 by engagement with the projection 36 will swing the lid 13 to its open position. The sleeve 33 is of too large a diameter to pass through the opening 35 so that the upper end of said sleeve will abut against the underside of the plate 24 to limit the upward movement of the sleeve under the force of the spring 32.

The rod 34 is provided with a laterally opening notch 44 adjacent its upper end so that by manually depressing the rod 34, said rod and the sleeves 31 and 33 can be laterally displaced sufficiently for engaging the notch with a portion of the plate 24 surrounding the opening 35 for latching the sleeve 33 and rod 34 in retracted positions, as illustrated in Figure 7 so that said parts will not be projected when the lid 13 is opened. It will be readily apparent that when the rod 34 is thus latched, the lid 13 will have to be manually swung to an open position.

The plate 22 is provided with an undercut end, as seen in Figure 2, for engaging a similarly inclined surface of the container body 12 and the opposite end of said plate seats in a recessed bottom portion of the body 12 and has a screw fastening 45 extending therethrough and into the body 12 for removably securing the plate 22 in position.

The container 11 is preferably formed of plastic or other electrical insulating material while the plates 22 and 24 and the sleeves 31 and 33 are preferably formed of an electrical conducting material such as metal. Accordingly, when the rod 34 is retracted as illustrated in Figure 2 or 7 the circuit of the bulb 28 and battery 29 will be interrupted due to the fact that the rod 34 is also formed of an electrical insulating material such as plastic and accordingly the bulb 28 will be deenergized whenever the cover 13 is closed. However, when the rod 34 is in its position as

seen in Figures 2 and 3 and the latch 37 is released, the spring 32 will project said rod and the sleeve 33 for swinging the lid 13 to its open position of Figure 4 and so that the sleeve 33 will engage the plate 24 so that an electric circuit will be completed from the threaded base of the bulb 28 through the plate 24, sleeves 33 and 31 and plate 22 to the negative end of the battery 29 for energizing the lamp bulb. The keys 26 may be removed from the compartment 16 as previously described and the light from the bulb 28 utilized to select the desired key 26 and for illuminating a keyhole into which said key is to be placed. For daytime use, the rod 34 is latched in a retracted position as illustrated in Figure 7 so that the bulb 28 will not be energized when the lid 13 is opened.

Various modifications and changes are contemplated and may obviously be resorted to, without departing from the spirit or scope of the invention as hereinafter defined by the appended claim.

I claim as my invention:

A key holder comprising a key container provided with a hinged lid, said container having a plurality of compartments, a self contained light source in one of said compartments including a dry cell battery contained in said compartment and a lamp bulb, said container being fomed of electrical insulating material, a plate of electrical conducting material for closing the upper end of said compartment and removably applied to the container, the threaded base of said lamp bulb extending threadedly through said plate for positioning its base contact in electrical engagement with the battery and for positioning the globe of the bulb above the plate to be normally enclosed by the container lid, said container having a removable plate of electrical conducting material for closing the bottom of said compartment and in contact with the base of the battery, a telescopic conductor member disposed between the plates including an outer section fixed to the last mentioned plate and an inner spring projected section slidably disposed in the outer section and having an outer end normally urged into engagement with the first mentioned plate for forming an electrical connection between said plates, and a rod of nonconducting material fixed to and extending from the outer end of the spring projected section slidably through the first mentioned plate having an end engaged by the lid, when the lid is in a closed position, for retaining said spring projected section out of engagement with said first mentioned plate to break the electric connection between the lamp bulb and battery.

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