

June 10, 1941.

F. P. LOMBARDI

2,245,349

ILLUMINATING CANE

Filed July 27, 1939

Fig. 1.

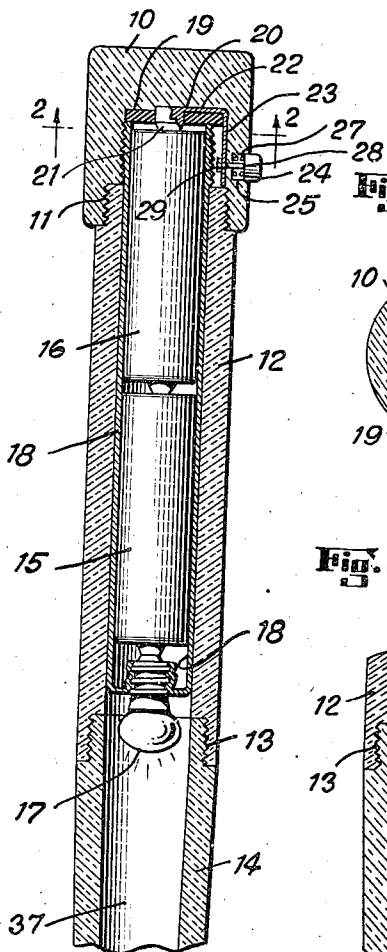


Fig. 2.

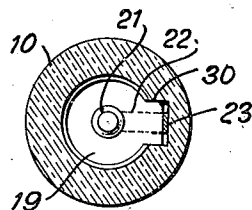


Fig. 3.

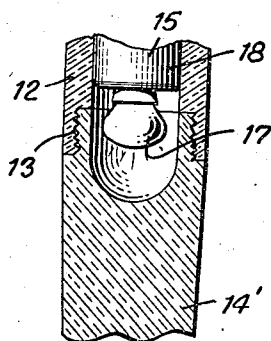


Fig. 4.

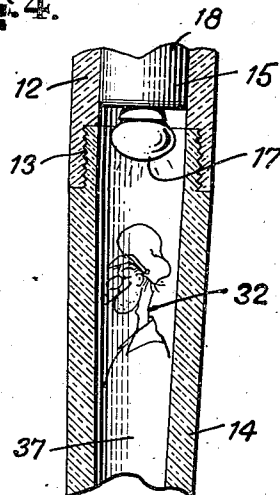
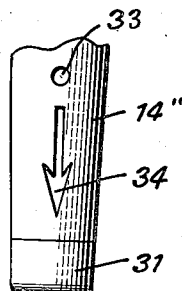
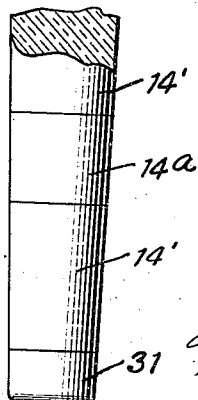
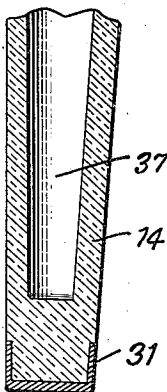
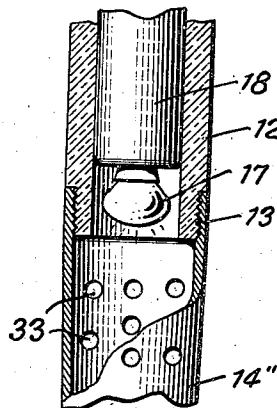


Fig. 5.



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2,245,349

ILLUMINATING CANE

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Application July 27, 1939, Serial No. 286,855

2 Claims. (Cl. 240-6.42)

The present invention relates to walking sticks, canes and the like, and more particularly to a walking stick or cane which can be illuminated at will.

The object of the present invention is to provide a walking stick or cane which is inexpensive to manufacture, durable in structure and compact in design and useful for the purposes hereinafter specified.

Another object of the present invention is to provide a walking stick which is made of a suitable transparent or translucent material substantially throughout its entire length, and having a lighting apparatus concealed therein for illuminating the translucent or transparent portion at night to warn or signal the approaching persons or vehicles of the presence of the wearer or the carrier.

When the walking stick is serving a double purpose of support and signalling, the translucent portion can of course be made of a suitable colored material indicative of danger.

Other objects of the present invention will of course appear in the following specification.

Reference will be had to the accompanying drawing forming a part of the specification in which similar reference characters indicate corresponding parts throughout the several views therein.

Figure 1 is a longitudinal section of one embodiment of the present invention.

Figure 2 is a transverse section taken along the line 2-2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a fragmentary detail of a modified form of the present invention.

Figures 4 and 5 are also modified forms.

Referring to Figure 1 of the drawing wherein I have shown, by way of illustration merely, a longitudinal sectional view of a walking stick comprising a hand grip or cap portion 10 threaded at 11, to receive a battery housing 12, which in turn is threaded or otherwise secured at 13 to a translucent or transparent staff portion 14.

Mounted within the battery housing 12, are a pair of flashlight batteries 15 and 16 and a flashlight bulb 17 arranged in circuit in the usual way within a metallic tubular member 18. This metallic tube 18 is threaded to the cap 10 and screwed down firmly upon an insulated washer 19 which insulates a terminal 20. The terminal 20 consists of a main terminal member 21 in contact with the base of the battery 16 and having an integral bus bar member 22, which is bent at right angles as shown at 23 to connect

with a push button 24 mounted in a suitable recess 25 in the cap 10, and urged outwardly by a spring 27 or equivalent. The button 24 has a small pin 28 secured to it, and this pin 28 is secured to the bus bar member 22 by means of a nut 29 screwed to the pin 28. The advantage of this construction is that the batteries and light bulb with the contact switch may be removed from the shaft in one unit with the cap 10.

The cap 10 has a keyway portion 30 to receive a projecting part of the washer 19, which serves to insulate the bus bar 22 from the metallic tube 18.

The lower portion of the staff 14 has the usual tip piece 31 for protecting the bottom of the staff.

Now referring to Figure 3 I have shown a modified form of stick wherein the structure is exactly like that shown in Figure 1, with the exception of the translucent portion, which is here shown solid as indicated at 14'.

In Figure 5 I have illustrated a modified form of staff portion 14'' which can be made of metal with perforations 33 punched in or a suitable design such as an arrow 34, or any other suitable design.

To illuminate the cane it is only necessary to press the button 24 which will bring the nut 29 into contact with the tubular member 18, this will then close the circuit through the terminal 21, batteries 16 and 15, and light the flash-light bulb 17 and then back through the tubular member 18 to the nut 29 in the usual way.

The battery housing member 12, and the cap 10 are preferably made of an opaque material and preferably round or cylindrical, but can of course be made square, hexagonal or any other suitable configuration.

When the bulb 17 is lit, the light is projected down the hollowed out portion 37 in the translucent staff member 14, thereby illuminating the entire staff portion 14.

In Figure 3, I have shown a solid staff portion 14' which will become illuminated throughout its entire length when the bulb 17 is lit.

The forms shown in Figures 1, 2 and 3 are preferably made for use as a substantial walking stick, because the material used is fairly thick and will be strong enough to be used as a support as well as a signal.

In Figure 4 I have shown the translucent staff member 14 with a fairly thick wall, and I might mention here that if this type of cane were used as a toy the wall could be made of very thin

Celluloid or any other suitable material that could accommodate stamped pictures on the inside thereof so that when the cane is not illuminated the pictures on the inside of the cane could not be seen but when the cane is illuminated they would appear on the outside of the cane.

If it is desirable to use a toy cane having a substantial staff portion showing some sort of a design thereon, a thin metal staff portion 14' could be used with punched out designs of any configuration throughout its entire length.

It may be desirable when using a translucent staff 14 or 14' to have the light alternately interrupted by opaque portions 14a as indicated in Figure 3.

It will be seen that this invention could be adapted for use as a signal light on other articles of manufacture, such as for example, umbrellas, bicycle handle bars or any other tubular structures that could accommodate batteries and a translucent or transparent member.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A walking stick of the character described comprising a cap formed with an upper and a lower threaded section in its inner wall, a metallic tube externally threaded at one end and supported in the upper threaded section of said cap, the other end of said tube formed with a socket to hold an electric bulb, a plurality of batteries in said tube, an electric bulb in said socket, a housing for said metallic tube and said electric bulb, said housing externally threaded at one end and secured in the lower threaded section of said cap, a hollow translucent elongated portion affixed to the other end of said housing and means for closing an electric circuit through said batteries and said electric bulb.

2. The structure recited in claim 1 wherein said means for closing the electric circuit comprises spaced make and break contacts, a recess formed in the side of said cap and a switch operator extended through said recess whereby said contacts may be opened or closed at will.

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