May 20, 1941. C. R. PEDERSEN 2,242,981

ILLUMINATED TWIRLING BATON

Filed Sept. 14, 1939

Fig. 1.

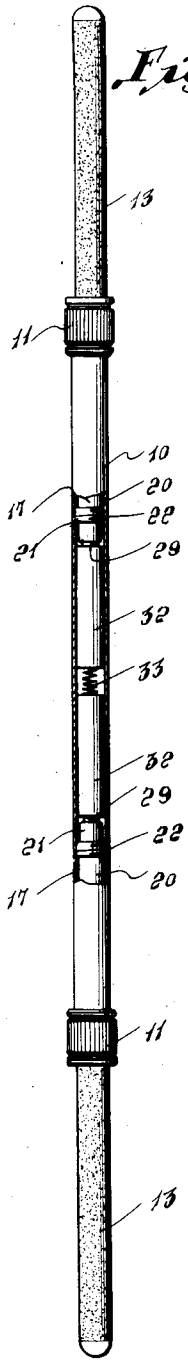


Fig. 2.

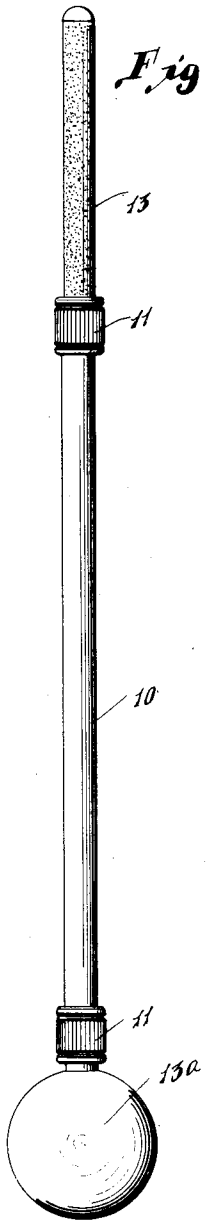
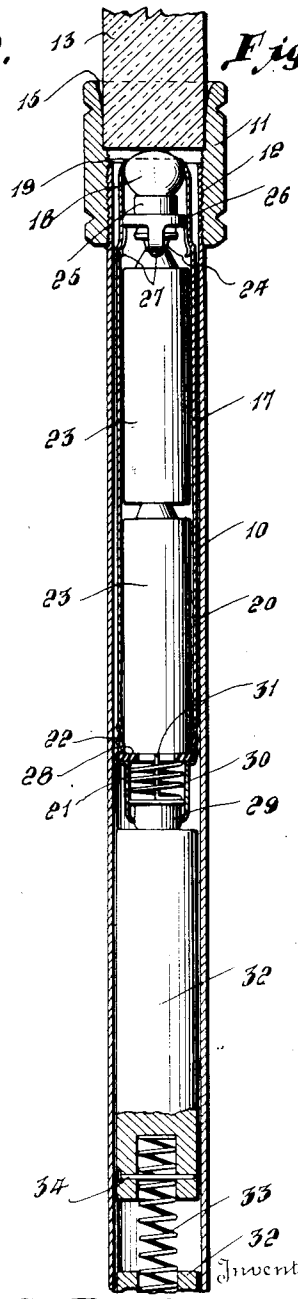


Fig. 3.



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ILLUMINATED TWIRLING BATON

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3 Claims. (Cl. 240—6.42)

This invention relates to a baton for drum majors and others primarily adapted for use at night outdoors, on a darkened stage or otherwise and it generally aims to provide a novel construction which may be illuminated or rendered luminous.

Another object is to provide a construction of baton having end portions which are of diaphanous material and adapted to be illuminated through the closing of switches of flashlights or the equivalent associated therewith and located within the baton.

Still further, it is aimed to provide for the closing of the switches through adjustment of socket members which are relatively heavy to afford momentum when twirling, and which socket members carry the diaphanous elements, the inner ends of the latter preferably being tapered in the sockets in order to cushion the blow when dropped.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawing illustrating an operative embodiment.

In said drawing:

Figure 1 is a view of the baton, partly broken away, to disclose the interior construction;

Figure 2 is an elevation of the baton showing the selective use of different forms of diaphanous end elements, and

Figure 3 is an enlarged substantially central longitudinal sectional view fragmentarily showing the baton.

Referring specifically to the drawing, the baton includes a tubular section 10 of any suitable length and preferably of metal on the ends of which, socket members 11 are externally screw threaded as at 12. Each socket member at the outer end carries a diaphanous element 13 having their inner end portions press fitted into tapered walls 15 of the socket members. The tapered joint is important since it will cushion the blow on the diaphanous element 13, when the baton is dropped. Said socket members 11 are relatively large and heavy, so that they will give the necessary momentum when twirling.

The diaphanous elements 13 may be made of any suitable material, for instance "Lucite" which is an optically clear plastic. They may also be made of any other suitable transparent or translucent material like glass, synthetic resin or otherwise. Such elements 13 may be externally roughened to increase the lighting effect, as by roughening them with sand paper.

Located within the tubular section 10 are two removable, self contained flashlights 17 or any other equivalent lighting means. Such flashlights are of the pentype and have electric bulbs as at 18 in contact with the inner ends of the adjacent diaphanous elements 13. Said bulbs 18 slightly project beyond constricted ends 19 of casings 20 having removable end caps 21 attached thereto by screw threads at 22. Within each casing are one or more removable batteries 23 having adjacent terminals in contact and a terminal of each outermost battery in contact with the adjacent central electrode 24 of the bulb 18 and which is in conducting relation with its filament. Also in conducting relation with the filament is the conducting shell 25 of the bulb, which is insulated as usual from the contact 24 and which is screw threaded into a socket member or ring 26 having expansive fingers, removably holding the same in friction tight relation with the inner wall of casing 20. The batteries 23 are insulated from the casing 20 by an insulating washer as at 28. Each cap 21 carries a slidable plunger member 29, normally urged outwardly by an expansive spring 30 which has a central member 31, adapted to engage the adjacent contact or end of the batteries 23. Spring 30 normally urges the plunger switch 29 away from the batteries and the element 31 out of contact with the batteries and hence the electric circuit through the bulb 18 is normally broken.

Within the tube 10 are removable floating filler members 32, for instance of wood, which are joined by a coil spring 33 secured to them by fastenings 34.

As a result of the construction described, the baton may at any time be used as an ordinary baton. In addition, at night, outdoors or on a darkened stage or otherwise, the bulbs 18 may at any time be energized so as to illuminate the diaphanous elements 13, so that they may be readily visible and have a novel effect. In order to cause the illumination or energization of the bulbs 18 from their batteries 23, the socket members 11 are turned so as to move the same inwardly and through their contact with the bulbs 18, bodily move the flashlights 17 inwardly, with the exception of the plunger switches 29, so that the elements 31 will be engaged with the batteries and electric circuits established through the bulbs. The circuits may be opened at any time, by loosening the sockets 11 at the screw threads, to a slight extent, that is, sufficient to enable springs 30 to move the portions 31 out of engagement with the batteries.

The diaphanous elements 13 may be of any desired shape and size and for instance in lieu of an attenuated element as shown at 13, the same may be in a ball as suggested at 13*a*, being of the identical material as set forth with respect to the elements 13. One or a pair of the sockets equipped with each form of the diaphanous element may be employed and used interchangeably as desired.

In order to effect color changes or variations, colored disks of transparent or translucent Cellophane or the equivalent, may be interposed between the bulbs 18 and inner ends of the elements 13 or 13*a*.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:

1. A baton of the class described having a tubular enclosing section, a socket member adjustably secured on one end of said section, a diaphanous element extending from the socket member, a flashlight mounted within and having a longitudinal movement independently of said section, said flashlight having a switch, abutment means for the switch located within the enclosing section, the bulb of said flashlight being in contact with the inner end of said diaphanous element so that the latter will cause the flashlight to slide bodily relatively to the enclosing section through operation of the socket member to operate the switch and cause illumination of the diaphanous element.

2. A baton of the class described having a tubular enclosing section, socket members adjustably secured on opposite ends of said section, diaphanous elements extending from the socket members, a pair of longitudinally alined flashlights mounted within and having longitudinal movement independently of said section, said flashlights having switches, the bulbs of said flashlights being respectively in contact with the inner ends of said diaphanous elements so that the latter will cause the flashlights to slide bodily relatively to the enclosing section through operation of the socket members to operate the switches and cause illumination of the diaphanous members.

3. A baton of the class described having a tubular enclosing section, socket members adjustably secured on opposite ends of said section, diaphanous elements extending from the socket members, a pair of longitudinally alined flashlights mounted within and having longitudinal movement independently of said section, said flashlights having switches, the bulbs of said flashlights being respectively in contact with the inner ends of said diaphanous elements so that the latter will cause the flashlights to slide bodily relatively to the enclosing section through operation of the socket members to operate the switches and cause illumination of the diaphanous members, and floating means within the enclosing section between the flashlights and in abutment with the switches.

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