April 21, 1942. W. M. MOXLEY 2,280,343

BATTERY RETAINING AND TENSIONING MEANS FOR HAND LANTERNS

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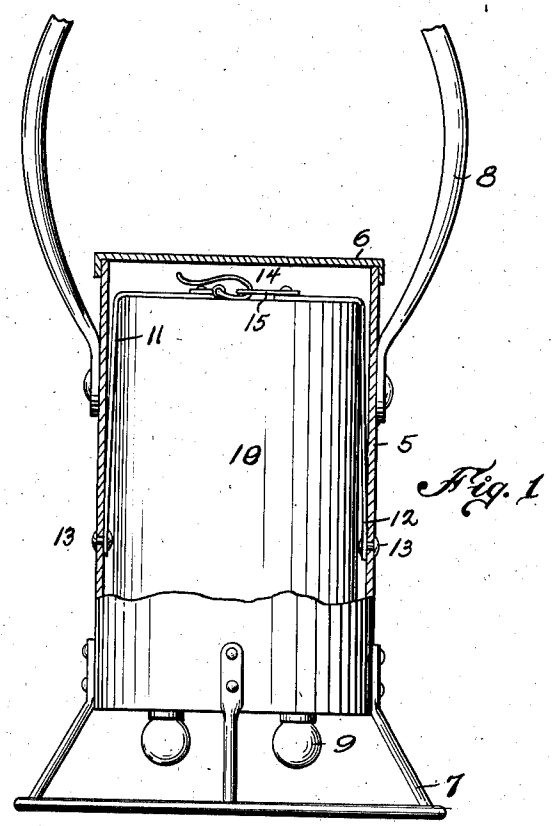


Fig. 1

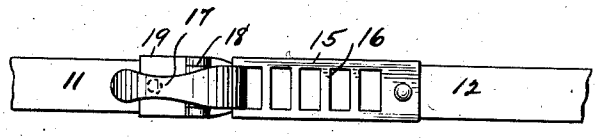


Fig. 2

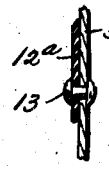


Fig 3.

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BATTERY RETAINING AND TENSIONING MEANS FOR HAND LANTERNS

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2 Claims. (Cl. 240—10.63)

This invention relates to electric hand lanterns of the general character of those disclosed in the patent to Easley, 2,013,380 and Moxley, 2,127,133. Hand lanterns of this general type have become very popular and are used for many purposes. Among other things they are used largely by trainmen, such as brakemen, conductors, etc., for signaling and when so used they must be swung to positions far out of their normal upright or vertical positions.

The primary object of the invention is to provide a lantern of this type with means for holding its battery always in firm contact with the contacts of its light bulbs no matter how the lantern body may be swung.

The means usually employed in known constructions is to provide some sort of pressure creating element, such as a spring, bearing between the top of the battery cell and the lamp body or casing. However, this method has proven to be open to serious objection, because in order to prevent the cover from being dislodged under the action of the spring, the cover must be made to fit so tightly that it becomes a troublesome task to remove and replace it when a new battery is to be substituted for an exhausted one. Further, if the edge of a tightly fitting cover has become dented during use, it is almost impossible to replace it upon the lamp body or casing if it is once removed.

The present invention aims to avoid all of the foregoing difficulties by providing means for creating pressure or thrust upon the battery from the sides of the casing or lamp body itself, and wholly independently of the cover. Consequently, it will be no longer necessary to have such tight fitting covers as will cause the user trouble, because the holder will hold the battery in place even with the cover removed.

The invention will be best understood by reference to the accompanying drawing, wherein

Figure 1 is a view partly in front elevation and partly in vertical section, illustrating a hand lantern of a known form having one form of pressure creating means applied thereto;

Figure 2 is a fragmentary plan view of the pressure creating means and;

Figure 3 is a fragmentary sectional view of a modified form of pressure creating means.

Like numerals designate corresponding parts throughout the several figures of the drawing.

Referring to the drawing:

5 designates the body or casing of an electrical hand lantern, 6 the cover, 7 the supporting legs, 8 the bail, 9 the electric bulbs, and 10 the usual battery cell employed for supplying energy to the bulbs, all of these parts being old in the patents named above, as well as in many other patents.

In carrying out the present invention, I provide any suitable pressure creating means acting between the body 5 and the battery cell 10 in such fashion as to tend to thrust the battery toward the light bulbs. In Figs. 1 and 2 these means comprise straps 11 and 12 that are secured at their lower ends to the body 5 by rivets 13. Any suitable drawing means for drawing the upper ends of these straps toward each other may be employed, such for example, as a suitable buckle. However, I prefer to employ the well known type of fastener commonly used upon galoshes and the like and comprising a plate 15 to which the end of the strap 12 is pivoted at 14. This plate is provided with a series of slots 16, any one of which is adapted to receive a curved, hook-like member 17 that is pivotally mounted at 18 upon a plate 19, the latter plate being secured to the end of the strap 11. Fastenings of this sort are adapted to exert a desired drawing action as the hook is swung over to the left after being engaged in a desired one of the slots 16 and to remain in such drawing position when its free end is pressed as far as possible toward plate 19.

The straps 11 and 12 may be made of any desired material; fabric, leather or otherwise and they may be either elastic or inelastic. In Fig. 3 I have indicated an elastic band 12a secured to the body 5 by one of the rivets 13, it being apparent that a band of this sort engaged at its ends by the rivets 13, with the body 5, would serve to yieldingly thrust the battery cell toward the bulbs.

I am well aware that it is common practice to pass a pair of straps around objects to be held in place and to provide the ends of the straps with drawing elements such as buckles. However, as far as I know, I am the first to exert an end thrust upon a battery cell by means of strands or straps connected to the lamp casing. Consequently, it is to be understood that the invention is not limited to the precise construction set forth but that it includes within its purview whatever changes fairly come within either the terms or the spirit of the appended claims.

Having described my invention, what I claim is:

1. In an electric hand lantern of the type comprising a hollow lamp body, a cover upon the top of the lamp body, a lamp bulb carried at the bottom of the lamp body, and a bail like handle secured to the lamp body and extending over the

top thereof and by which said body may be swung, a constrictable strand-like element having its ends secured to the inner sides of the body at a point materially below the top of the battery cell, said strand extending in a loop over the top of the battery cell and acting by its constricting action to continually thrust the battery cell toward the bulb at the bottom of the body to thereby maintain contact between battery cell and bulb wholly under the influence of a thrust exerted between the battery cell and the inner sides of the lamp body and wholly independently of the cover.

2. In combination with an electric hand lantern comprising a lamp body, a cover therefor, a lamp bulb adjacent the bottom thereof, a battery cell in the body, a bail secured to the lamp body by which said body may be swung, a pair of straps having their lower ends secured to the inner sides of the lamp body at a point intermediate the height of said lamp body, said straps extending thence upwardly and toward each other over the top of the battery cell, and interengaging drawing means upon the ends of said straps by which the battery cell may be held in place and thrust toward the lamp bulb independently of the cover.

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