Jan. 27, 1959 D. W. WHITNEY 2,871,343

INFLATABLE DECORATIVE LANTERN

Filed Nov. 4, 1955

Fig. 1.

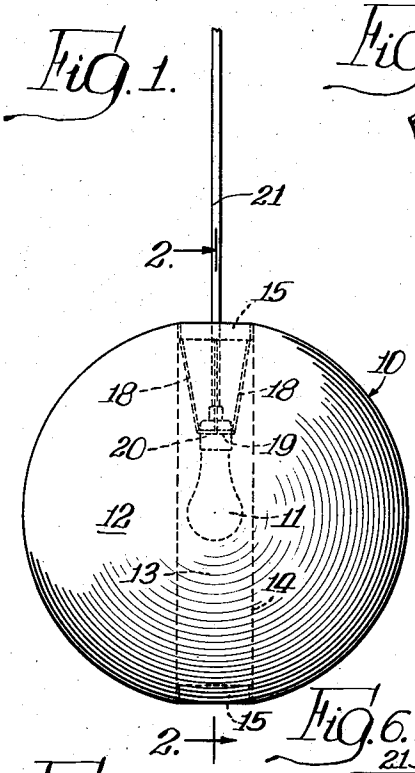


Fig. 2.

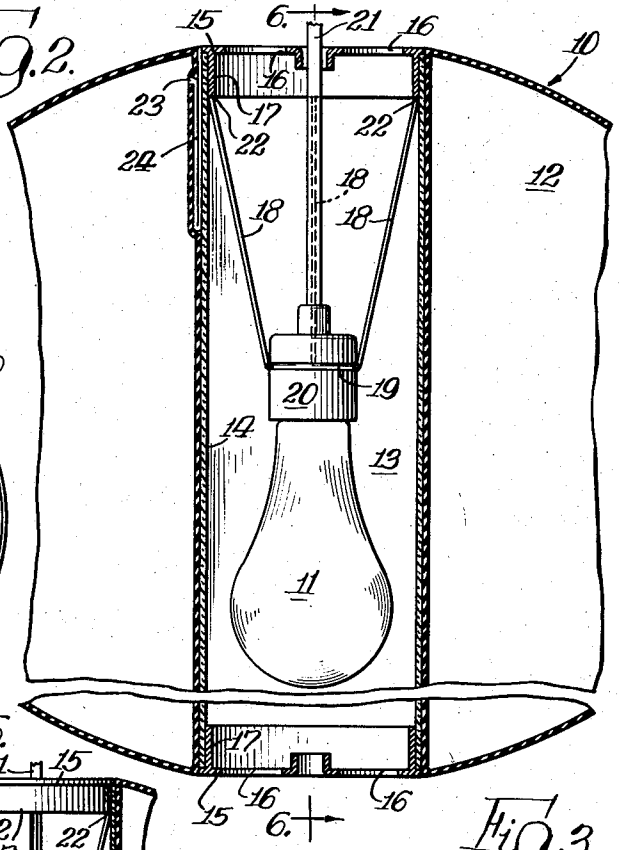


Fig. 6.

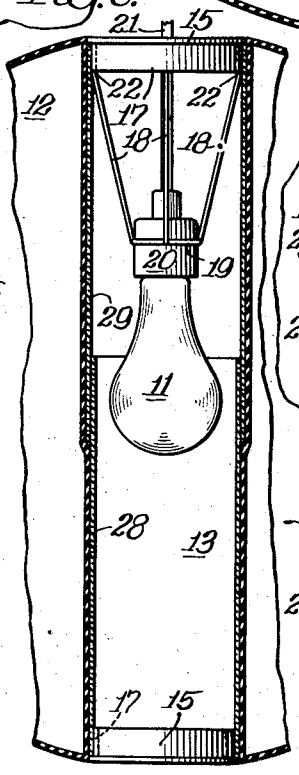


Fig. 4.

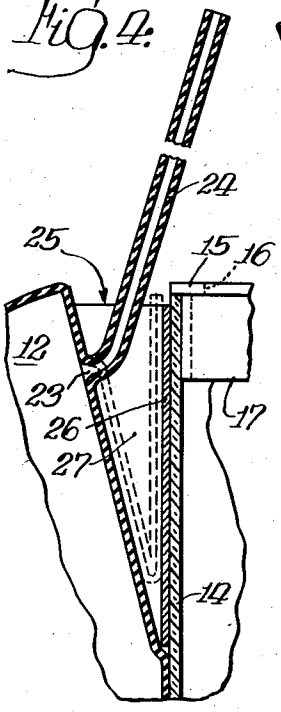


Fig. 3.

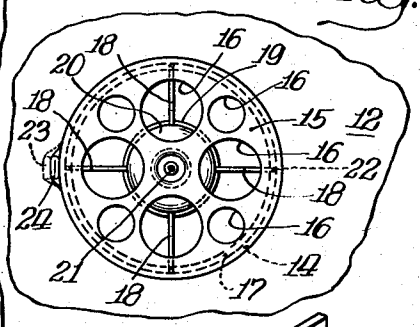
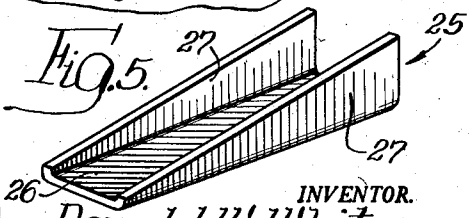


Fig. 5.



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INFLATABLE DECORATIVE LANTERN

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6 Claims. (Cl. 240—10)

This invention relates to a decorative device and, more particularly, to a decorative device which may be illuminated to form a decorative lantern or lamp.

The general object of the invention is to produce a new and improved decorative device of the character described.

A more specific object of the invention is to produce a translucent inflatable, decorative device adapted to receive a source of light so as to constitute an illuminated lantern or lamp.

Another object of the invention is to produce a decorative device of the character described in the preceding paragraph with means for conveniently inflating and deflating the device.

A further object of this invention is to produce a device of the character described in the preceding paragraphs wherein the globe is inflated through a filler opening in the surface of the center portion of the annular globe.

Yet another object of the invention is to produce a decorative lantern or lamp of the character described in which the chimney is frictionally secured within the open center of the annular globe by means of the pressure of the inflated globe against the chimney.

Yet a further object of this invention is to provide a decorative lantern of the type wherein the globe is inflated by air forced through a filler tube and the air is sealed within the globe by doubling the filler tube upon itself between the chimney and the wall of the globe.

Still another object of this invention is to produce a device of the character described in the preceding paragraphs wherein the chimney consists of extensible parts which can be adjusted to vary the length of the chimney to conform to varied sizes of globes.

Other and further objects of the invention will be readily apparent from the following description and drawings in which:

Fig. 1 is a side elevational view of a decorative device embodying the invention;

Fig. 2 is an enlarged vertical sectional view taken along line 2—2 of Fig. 1;

Fig. 3 is a partial top plan view of the device of Fig. 1;

Fig. 4 is a partial enlarged sectional view of the device of Fig. 1, showing the position of a filler tube during the inflating operation, the lighter lines representing the position of the filler tube prior to removal of the channel member;

Fig. 5 is a perspective view of the wedged channel member; and

Fig. 6 is an enlarged vertical sectional view taken along line 6—6 of Fig. 2 and showing a modified form of chimney construction.

While this invention is susceptible of embodiments in many different forms there is shown in the drawings and will herein be described in detail several embodiments with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention

to the embodiment illustrated. The scope of the invention will be pointed out in the appended claims.

Referring now to the drawings, the decorative device of the present invention is, for the purpose of exemplary disclosure, shown as embodied in a balloon-shaped lantern 10 adapted to be illuminated by an electric light bulb 11 supported therein.

The lantern 10 comprises a flexible, inflatable, air impervious globe 12 which is preferably translucent and gaily colored and a chimney 14 which is preferably translucent and relatively rigid. The globe is of an annular configuration with an open, generally cylindrical center 13. The chimney 14 is separably mounted within the open center 13 and is open ended to permit ventilation of air therethrough to cool the light bulb 11 which is mounted in the center of the chimney. The open ends of the chimney are reinforced by caps 15 removably secured thereto frictionally, positively, or otherwise. Openings 16 are provided in the caps to allow ventilation and are preferably designed to give a decorative effect to the ends of the chimney. These caps and the chimney itself are preferably made of a resilient plastic material. Each cap has a depending ring 17 extending into the chimney and abutting the inner wall of the chimney, thereby reinforcing the chimney wall. The upper ring further serves as a retaining member for mounting the electric light within the chimney.

An electrical conductor 21 extends from an outside source of electricity into the chimney to supply power to a light socket 20 in which the light bulb 11 is mounted. The conductor also serves as a means of suspending the lantern downwardly from a suitable hook. This is accomplished by spring arms 18 extending from a ring 19 engaging the exterior surface of the light socket 20. These spring arms press outwardly against the inner chimney wall and have outer ends 22 which engage the inner surface of the ring 17 of the upper cap 15 thereby retaining the light bulb within the chimney and serving to suspend the lantern from the electrical conductor 21.

To assemble the light socket within the chimney, the socket and spring arms attached thereto are inserted in the upper end of the chimney far enough from the end of the chimney so that the ends 22 of the arms 18 are spaced from the end of the chimney at least a distance equal to the width of the ring 17, the ends 22 of the arms engaging the inner wall of the chimney. The cap 15 is then mounted on the end of the chimney with the conductor 21 extending through the cap. The conductor is then pulled upwardly so that the ends 22 of the arms 18 engage the ring 17.

To assemble the chimney 14 and the globe 12 to form the lantern 10, the deflated annular globe 12 is partially inflated so as to assume a soft doughnut-like configuration. The chimney is then inserted within the open center of the globe and the globe is further inflated to the desired shape. The open center of the globe is shaped to conform to the outer portion of the chimney and the diameter of the open center of the inflated globe without a chimney mounted therein is slightly less than the outer diameter of the chimney. When the globe having an open center characterized by the above description is fully inflated with the chimney mounted in the open center, the pressure inside of the globe forces the surface of the center of the globe against the chimney to frictionally secure the chimney within the open center. Thus, no additional structure is required to secure the chimney within the globe to form the lantern and the chimney will remain frictionally secured within the globe until the globe is deflated.

The globe is inflated and deflated through a filler opening 23 in the surface of the open center of the

globe. This opening is at a point which is adjacent the chimney when the lantern is fully inflated. A fill-tube **24** is attached to the globe encompassing the filler opening so that air may be forced through the fill-tube into the globe.

After the globe has been fully inflated, the fill-tube can be doubled upon itself and forced to a position between the chimney and the globe. The doubled fill-tube is thus squeezed upon itself between the chimney and the globe (as shown in Figs. 2 and 3) thereby sealing the air within the globe to maintain the desired pressure within the globe.

To facilitate the inflating of the globe and to prevent the sealing of the fill-tube prior to the desired inflation of the globe a wedged channel **25** may be inserted between the chimney and the globe so as to wedge the filler opening **23** and the fill-tube **24** away from the chimney. This wedged channel has a base **26** and two parallel wedge-shaped sides **27** extending from the base. The wedged channel **25** is inserted between the chimney and globe so that the base **26** lies along the chimney wall and the wedge-shaped sides **27** force the globe away from the chimney with the widest edge of the sides at the extremity of the globe. The wedged channel is placed so that the filler opening **23** is between the wedge-shaped sides **27** and away from the chimney. The fill-tube **24** is extended outwardly past the end of the chimney so that the globe can be easily inflated or deflated. With the wedged channel mounted as described above the air pressure within the globe cannot seal the fill-tube against the chimney before the desired inflation of the globe. To seal the globe after full inflation the fill-tube **24** is first doubled upon itself within the wedged channel area. The wedged channel is then removed and the air pressure in the globe squeezes the doubled fill-tube against the chimney thereby sealing the globe.

The complete lantern of this invention is easily capable of merchandising and shipping in a minimum of space. The relatively rigid chimney can be utilized as a protecting container into which the deflated globe may be packaged for storage or shipment. Thus, a deflated lantern can be contained in a space which is a fraction of its inflated size.

A varied form of chimney construction utilizing freely slidable extensible parts is shown in Fig. 6. This chimney structure consists of a lower chimney section **28** and an upper chimney section **29** having an inner diameter approximately equal to the outer diameter of the lower section **28**. A desired length of the lower section can readily be telescoped within the upper section and, when assembled within an inflated globe of annular configuration, will provide a chimney having a desired fixed overall length. Thus, the overall length of the chimney can be varied considerably to conform to a particular globe size and one chimney construction can be utilized in the manufacture and merchandising of many different sized globes reducing the costs of production and inventory.

From the foregoing it can be seen that the present invention results in a lantern composed of two separable parts, a globe and a chimney, which can be conveniently packaged by storing the deflated globe within the chimney and can be simply and quickly assembled by partially inflating the globe, inserting the chimney within the open center of the globe and then fully inflating the globe. Further, the inflated globe can be quickly and easily sealed. This is an ideal lantern for decoration purposes where it is to be assembled and used and also where it is desirable to assemble quickly a multitude of lanterns and after use to store them in a minimum of space. Further, the small number of parts, the lack of complicated structure and the ease of assembly makes this lantern capable of inexpensive and simple production and merchandising.

I claim:

1. A lantern comprising: an elongated translucent chimney open at its ends to provide a passage for light bulb cooling air; a light bulb carrier positioned within the chimney for supporting a bulb therein; and an annular inflatable transulcent globe member having an inner surface in continuous contact with the chimney when inflated, said contact providing frictional assembly of the globe and chimney for maintaining the same together in operative relationship during use.

2. The lantern of claim 1 wherein said chimney includes means for adjusting its length.

3. The lantern of claim 1 wherein said chimney comprises two sections telescopically positioned one within the other and adapted to be moved relative to each other for adjusting the length of said chimney.

4. A lantern comprising: an elongated cylindrical chimney of translucent material open at its ends to provide a passage for light bulb cooling air; a light bulb carrier; means on said light bulb carrier for positioning said carrier within said chimney for supporting a bulb therein; and an annular translucent inflatable flexible globe member having an inner surface in continuous contact with the chimney when inflated, said contact providing frictional assembly of the globe and chimney for maintaining the same together in operative relationship during use, said globe having an inflating means and means for closing said inflating means.

5. A lantern comprising: an elongated cylindrical chimney of translucent material open at its ends to provide a passage for light bulb cooling air ; a light bulb carrier; a plurality of outwardly extending spring arms on said carrier abutting against said chimney to mount said carrier within said chimney for supporting a bulb therein; and an annular translucent inflatable flexible globe member having an inner surface in continuous contact with the chimney when inflated; said globe having a filling tube located in said inner surface and automatically held closed by the frictional assembly of said chimney and said globe.

6. A lantern comprising: an elongated cylindrical chimney of translucent material open at its ends to provide a passage for light bulb cooling air; an electrical light socket and a plurality of spring arms secured to said socket yieldingly urged outwardly against the wall of said chimney to mount said socket within said chimney for supporting a light bulb therein, said chimney having stop means adjacent its ends for preventing the removal of said socket; and an annular translucent air inflated flexible globe member having an inner surface in continuous contact with the chimney when inflated, said contact providing frictional assembly of the globe and chimney for maintaining the same together in operative relationship during use; said globe having an elongated filling tube located in its inner surface in position to be pressed against the outer surface of said chimney when the globe is inflated, said tube being doubled back upon itself and automatically pinched closed between the globe and chimney simultaneously as said globe is inflated and is retained on said chimney by the frictional assembly thereof.

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