Nov. 24, 1964 F. W. RENWICK, SR., ETAL 3,158,015

ARTIFICIAL CANDLE

Filed Dec. 11, 1961

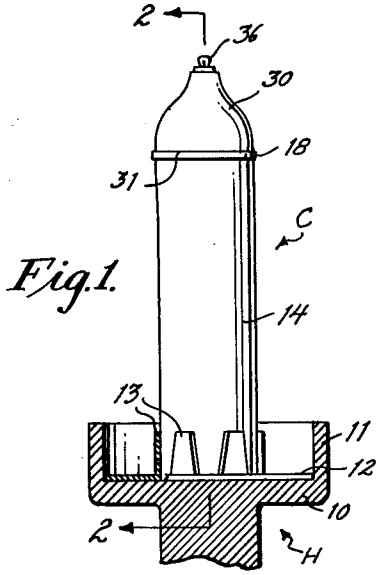


Fig. 1.

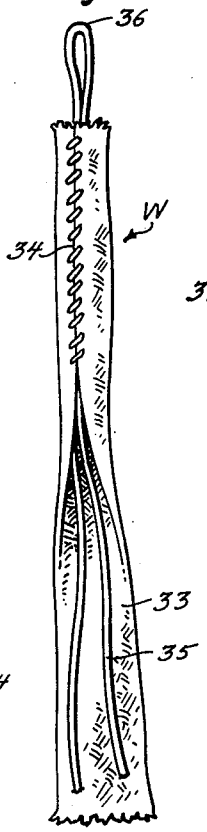


Fig. 5.

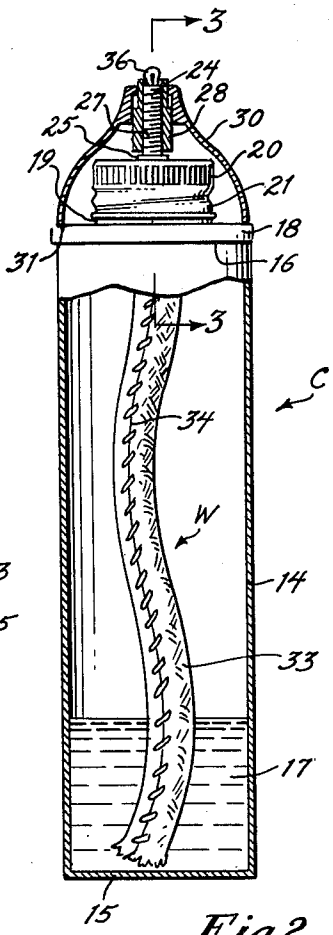


Fig. 2.

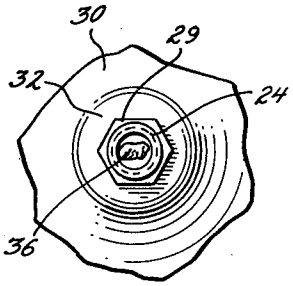


Fig. 4.

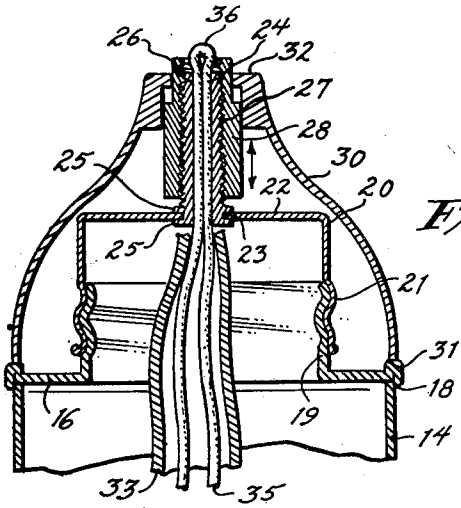


Fig. 3.

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ARTIFICIAL CANDLE

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3 Claims. (Cl. 67—53)

The present invention relates to an artificial candle and is primarily concerned with certain novel improvements which are believed to render such a candle more usable under practical conditions.

From its very nature an artificial candle includes a reservoir containing a supply of liquid fuel. Obviously such a reservoir should be of maximum size so as to require refilling thereof at only infrequent intervals. At the same time the reservoir must be susceptible of refilling and the upper wall structure must accommodate a passage of a wick therethrough.

With these factors in mind, an important object of the invention is to provide an artificial candle which includes, as a main characteristic element, a hollow body, preferably cylindrical, which functions as a fuel reservoir. This body is closed at the top by a top wall which carries a threaded neck defining an opening. Screwed on to this threaded neck is a cap member having a small central opening and which carries a tubular wick holder in alignment with said opening.

Under practical conditions of usage, an artificial candle is not always maintained in an upright or vertical position. Ofttimes it is knocked over into a horizontal position and in this condition there is a strong possibility of the fuel content leaking out through the opening which accommodates the wick. With this condition in mind another highly important object of the invention is to provide in an artificial candle of the character indicated, a wick assembly which includes an innerwick member that is particularly adapted to substantially completely fill the wick opening in the cap so as to reduce to a minimum the liability of leakage.

More in detail, the invention has as an object, the provision, in an artificial candle of the type aforesaid, of a wick assembly comprising an outer sleeve of fabrics from which wicks are commonly made and which extends substantially the complete height of the fuel reservoir in which it is positioned with the sleeve housing an innerwick member in the form of a fabric cord that is doubled back on itself with the bend or bight of the cord in the uppermost position. This doubled back inner wick cord is drawn through the wick opening in the cap and the wick holder. The bend or bight at the top particularly lends itself to this operation with the cord jamming and completely filling the wick opening. It is this jamming of the innerwick cord in the wick opening which reduces liability of leakage to a minimum.

Under certain conditions of usage it is desirable to make provision for varying the extent to which the tip of the wick is exposed as well as to completely cover the wick so as to snuff out the light. Stating it another way, it is desirable that the intensity of the flame be varied and on occasion to be completely snuffed.

With these factors in mind a further important object of the invention is to provide in an artificial candle of the type noted, a wick holder that is externally threaded and on to which is screwed a snuffer which may be rotated to move longitudinally of the wick holder. This snuffer has a contour that is noncircular such as hexagonal and is slidably received in a correspondingly shaped opening in the top of a tip member. The tip member has a lower edge which conforms in shape and dimension to the top of the casing with a curved surface extending from this lower edge to the opening in the top.

The tip member is spaced from the threaded boss of the casing top and cap carried thereby and thus provides an air chamber which functions as a heat insulator. It is evident that this tip member is readily available for engagement by the fingers of a user to rotate the snuffer and thus move the latter longitudinally along the wick holder. As this operation takes place the tip member will remain in its position resting on the top of the casing because of the sliding relation between the tip member and the snuffer. The hexagonal opening and correspondingly shaped contour of the snuffer provides the driving relation between the tip member and the snuffer.

In night and supper clubs and other places where candles are used, it is conventional practice to detachably mount a candle in a holder. This same condition obtains for artificial candles. Thus, another object of the present invention is to provide a highly simplified means for mounting an artificial candle in a holder and thus adapting the artificial candle to any holder. Such an adaptor may take any of several forms although one particular type will be hereinafter described in detail.

Various other more detailed objects and advantages of the invention such as arise in connection with carrying out the above noted ideas in a practical embodiment will in part become apparent and in part be hereinafter stated as the description of the invention proceeds.

The invention therefore comprises an artificial candle which consists essentially of a casing defining a fuel reservoir and having a top wall carrying a threaded neck with a cap screwed on to the neck and having a wick opening. A wick holder is in turn carried by the cap at the wick opening and is externally threaded. A snuffer is screwed on to the wick holder and has a noncircular contour. A tip member having a lower edge conforming to the cross sectional shape of the casing and an opening corresponding in shape to the contour of the snuffer which it receives is positioned over the cap in spaced relation thereto and is available as an operating member for adjusting the snuffer on the wick holder. A wick assembly comprising an outer sleeve that is received in the casing and a doubled back inner cord which extends through the wick opening and wick holder is an important feature of the invention.

For a full and more complete understanding of the invention reference may be had to the following description and accompanying drawing, wherein:

FIGURE 1 is a side view of an artificial candle made in accordance with the precepts of this invention and shown as mounted in a holder that is shown in section.

FIGURE 2 is a side view of the candle per se with parts broken away and shown in section, the sectional portions being taken about on the plane represented by the line 2—2 of FIGURE 1.

FIGURE 3 is a sectional view taken on an enlarged scale and about on the plane represented by the line 3—3 of FIGURE 2.

FIGURE 4 is a top plan view of the candle depicting the manner in which opening in the top of the tip member receives a snuffer; and

FIGURE 5 is a detailed perspective of the wick assembly per se.

Referring now to the drawing wherein like reference characters denote corresponding parts and first more particularly to FIGURE 1 an artificial candle embodying the novel features of this invention is therein illustrated and referred to in its entirety by the reference character C. This candle C is shown as detachably mounted in a holder H. The latter has a bottom wall 10 and a cylindrical wall or skirt 11. The adaptor 12 is employed to achieve mounting of the candle C in the holder H. The adaptor 12 comprises a ring, the outer edge of which is snugly received within the cylindrical wall 11 and a cen-

tral opening defined by tabs 13 which are bent upwardly from the metal from which the ring is struck and which supportingly engages the candle C.

Referring now more particularly to FIGURE 2 the candle C is shown as including, as a characteristic and essential element, a casing 14 which may be of any cross sectional shape desired but in view of the aim of simulating a natural candle is preferably cylindrical. The casing 14 carries a flat bottom and a top wall 16. Needless to say the casing 14 is hollow and the interior thereof provides a fuel reservoir receiving a liquid fuel such as represented at 17.

Referring for the moment more particularly to FIGURE 3, it will be noted that if desired there may be a corner or shoulder 18 and the joinder of the top wall 16 to the cylindrical wall 14. The purpose of this is to accommodate a tip member which will later be described. Carried by the top wall 16 is a neck or boss 19 which is threaded. This neck 19 defines an opening which communicates with the interior of the casing 14. A cap 20 has a threaded skirt 21 which is screwed on to the threaded neck 19 and a top wall 22 formed with a central opening 23. A wick holder 24 is mounted in the opening 23 such as by flanges 25 which are spaced about and which receive the edge of the top wall 20 which defines the opening 23. The wick holder 24 has a bore 26 and is externally threaded as shown at 27.

A snuffer 28 is screwed onto the wick holder 24 and has a noncircular contour such as the hexagonal formation depicted at 29 in FIGURE 4.

A tip member is designated 30. The tip member 30 has a lower edge 31 defining an opening corresponding in size and shape to the top wall 16 of the casing. It will be noted from FIGURE 3 that this lower edge 31 of the tip member is received on the cut out corner or shoulder 18 of the casing. The tip member 30 also has an upper end wall 32 formed with an opening corresponding in size and shape to the snuffer which is slidably received therein. Thus, with a snuffer 28 hexagonal in shape, the opening in the upper end 32 of the tip wall is also hexagonal and there is a sliding relation between the tip member and the snuffer. Between the lower edge 31 and upper end wall 32 the tip member 30 is curved so that it is in spaced relation to the cap 20 and provides an air insulating space over the upper end of the casing 14.

Referring now more particularly to FIGURE 5, a wick assembly is therein illustrated and referred to in its entirety by the reference character W. The wick assembly W comprises an outer sleeve 33 that is made from any fabric commonly recognized as suitable for wick material. Thus, a strip of such fabric may be stitched along the seams 34 to provide this sleeve construction. Sleeve 33 encloses an inner cord 35 that is doubled back to provide twin cords which are joined at the top by a bight or bend 36.

It will be noted from FIGURES 2 and 3 that the outer sleeve 33 of the wick W is entirely contained within the casing 14, thus it extends from a point just below the top wall 22 of the cap 20 down to the bottom of 15 and preferably assumes the sinuous shape illustrated in FIGURE 2. The inner twin cords 35 are pulled through the bore 26 of the wick holder 25 by inserting an appropriate tool in the bight 36. As mentioned above it is highly important that the twin cords 35 jam and completely fill the bore 26 so as to hold down leakage to a minimum should the candle be upset from its upright position. As the twin cords 35 are pulled through the bore 26 of the wick holder, a desired amount of the wick cords are left exposed above the end of the wick holder. However, the snuffer 28 is susceptible of adjustment by operation of the tip member 30 to vary the extent of exposure of the wick cords. Thus, if the snuffer is moved up high enough the flame is completely extinguished or it may be moved to various intermediate positions to afford a flame of a desired intensity.

Operation

While the mode of operation and manner of using the artificial candle of this invention is believed to be obvious from the illustration of the drawing and description of parts given, they may be briefly outlined as follows:

With the cap 20 removed from the neck 19, the interior of the casing 14 may be filled with an appropriate fuel. The cap 20 is now replaced in which position the outer sleeve 33 of the wick extends from top to bottom of the casing and the twin wick cords 35 jam and completely fill the opening in the wick holder. The upper end portion of these twin wick cords are exposed. The tip member 30 is then positioned over the top structure of the casing with the opening in the upper end wall 32 snugly and slidably receiving the snuffer 28. A source of flame is now employed to ignite the exposed portion of the wick cords. When adjustment of the flame is required, an operator simply engages the tip member 30 with his fingers and by rotating the tip member the driving relation with the snuffer will cause the snuffer to move longitudinally along the wick holder and vary the intensity of the flame. The tip member will always be at a temperature comfortable to the users touch because of the air space therebeneath. Moreover, the tip member will always rest on the top of the casing with no gap between the two because of the sliding relation between the tip member and the snuffer.

While the candle is designed so that the casing 14 will hold a large quantity of fuel, it may be refilled as occasion demands by first removing the tip member 30 and then the cap 20.

While a preferred specific embodiment of the invention is hereinbefore set forth, it is to be clearly understood that the invention is not to be limited to the exact constructions, mechanisms and devices illustrated and described because various modifications of these details may be provided in putting the invention into practice within the purview of the appended claims.

What is claimed is:

1. In an artificial candle including a casing defining a fuel reservoir and having a top wall formed with a neck, a cap on said neck, a wick holder carried by said cap and having a wick opening and a snuffer screwed on to said wick holder, the improvement consisting of: a wick assembly comprising an outer fabric sleeve housed within said casing and inner twin cords housed within said casing and passing through and completely filling said wick opening.

2. In an artificial candle including a casing defining a fuel reservoir and having a top wall formed with a neck, a cap on said neck, a wick holder carried by said cap and having a wick opening and a snuffer screwed onto said wick holder, the improvement consisting of: a wick assembly comprising an outer fabric sleeve positioned within said casing and extending substantially from the top to the bottom thereof and inner twin cords joined by a bight at the top, housed within said casing and passing through said wick opening in closely packed relation with respect thereto.

3. In an artificial candle including a casing defining a fuel reservoir and having a top wall formed with a neck, a cap on said neck, a wick holder carried by said cap and having a wick opening and a snuffer screwed on to said wick holder, the improvement consisting of: a wick assembly comprising an outer fabric sleeve housed within said casing and inner twin cords housed within said casing and passing through and completely filling said wick opening and a tip member mounted on the top of said casing in spaced relation to said cap and having

an upper end wall formed with an opening slidably and drivingly receiving said snuffer.

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