

[54] TRANSLUCENT PLASTIC CANDLE MOLD

[75] Inventor: Mort R. Berman, Brooklyn, N.Y.

[73] Assignee: Avalon Industries, Inc., Brooklyn, N.Y.

[22] Filed: Dec. 10, 1971

[21] Appl. No.: 206,755

[52] U.S. Cl. .... 249/94, 47/34, 249/134, 425/803

[51] Int. Cl. .... B29d 31/00

[58] Field of Search ..... 249/94, 93, 127, 249/120, 134; 425/803; 264/275; 220/82 R; 47/34, DIG. 7

[56] References Cited

UNITED STATES PATENTS

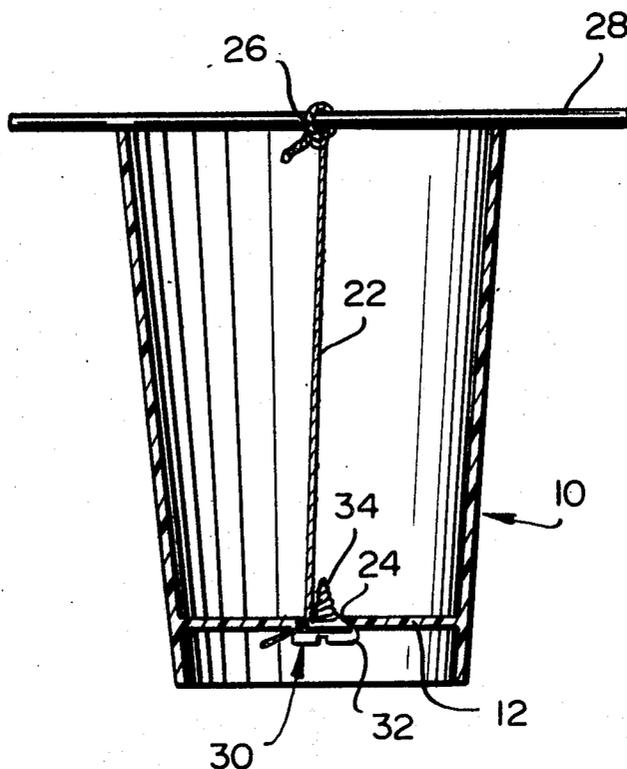
26,429	12/1859	Halvorson .....	249/94
2,961,850	11/1960	Tupper .....	249/127 X
3,149,188	9/1964	Schmitt .....	249/134 X
3,527,439	9/1970	Lawmaster .....	249/134 X
3,432,072	3/1969	Quercia .....	220/82 R X
3,009,603	11/1961	Stockdale .....	47/DIG. 7
3,002,308	10/1961	Decamp .....	47/34 UX

Primary Examiner—Robert D. Baldwin  
 Attorney—Morris Kirschstein, Bertram Ottinger et al.

[57] ABSTRACT

Apparatus for and method of making a candle having a wick fixed there within. The apparatus is comprised of a container having a closed end and an open end. The container is tapered towards the closed end thereof and has a hole formed within the closed end. The open end of the container has a first and second pair of protruding portions extending therefrom wherein the first pair is diametrically located from the second pair. A wick is passed through the hole at the closed end of the container and is attached to a solid bar, which bar extends over the open end of the container. The wick is pulled taut so that the bar is forced against the open end of the container and rests between each of the pair of protruding portions so as to limit the movement of the bar in a direction transverse to the axis of the bar. The tautly pulled wick is fastened to the closed end of the container by a screw. Molten wax is poured through the open end of and into the container and allowed to cool so as to solidify. The wick is disengaged from the bar and the closed end of the container and the finished candle is then removed therefrom.

6 Claims, 4 Drawing Figures



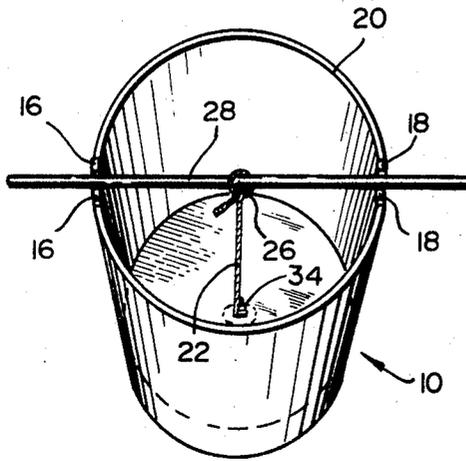


FIG. 1

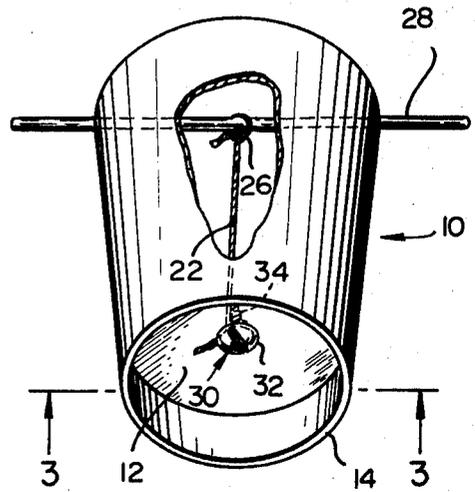


FIG. 2

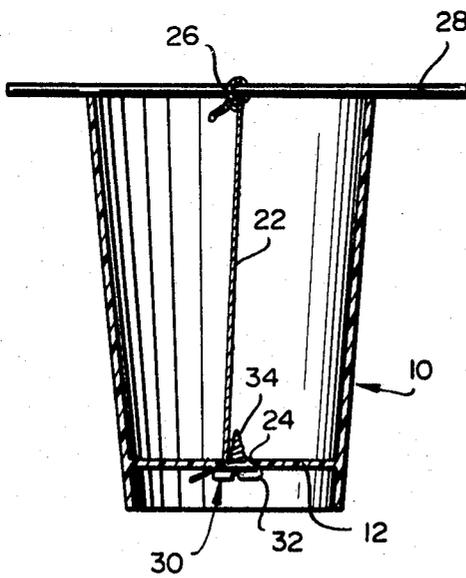


FIG. 3

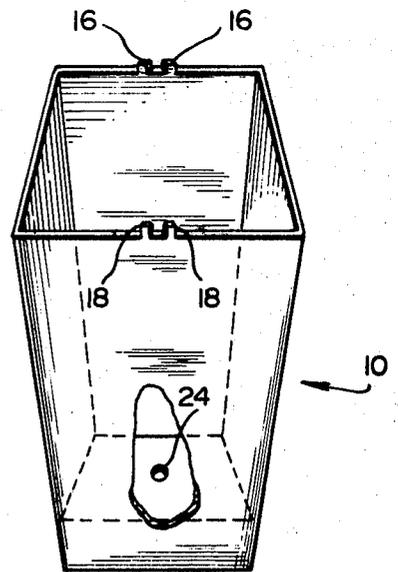


FIG. 4

## TRANSLUCENT PLASTIC CANDLE MOLD

### BACKGROUND OF THE INVENTION

This invention relates to an apparatus for making candles.

### SUMMARY OF THE INVENTION

It is an object of the invention to provide apparatus for making candles wherein that part of the wick which is embedded within the candle is of a fixed and determinable overall length.

Other objects of the invention will in part be obvious and in part be pointed out hereinafter.

### BRIEF DESCRIPTION OF THE INVENTION

In accordance with a broad aspect of the invention, candles of uniform size are made having wicks of the same overall length. A container in which the candle is formed has a closed and an open end wherein the container is tapered towards the closed end and the closed end has a hole formed therein, which hole is tapered towards the open end of the container. The container also contains a first and second pair of protruding portions which extend from the open end of the container, wherein the first pair is diametrically located with respect to the second pair. A wick is passed through the hole in the closed end of the container and is attached to a solid bar. The bar extends past the edge of the open end of the container and is located between each of the first and second pairs of protruding portions. The wick is pulled taut and the tautly pulled wick is fixed to the closed end of the container. Molten wax is then poured into the container and allowed to cool so as to solidify around at least a part of that portion of the wick which extends between the closed end and the open end of the container. The wick is disengaged from the closed end of the container and the bar at the open end of the container, and the candle is then removed from the container.

### BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings in which are shown various possible embodiments of my invention,

FIG. 1 is a perspective view of the apparatus used for making candles in accordance with the invention shown from the open end of the container;

FIG. 2 is a perspective view of the apparatus of FIG. 1 shown from the closed end of the container;

FIG. 3 is a cross-section of the apparatus shown in FIG. 2 taken along line 3-3; and

FIG. 4 is a perspective view of another geometrically shaped container.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

In accordance with one aspect of the invention, FIG. 1 shows a perspective view of a container 10, which container has a circular cross-section and is tapered towards its closed end 12. As shown in FIG. 2, closed end 12 is inset from a bottom edge 14 of container 10. Respective first and second pairs 16 and 18 of protrusions extend from an edge of an open end 20 of container 10. First pair 16 is diametrically located from second pair 18 along the edge of open end 20.

A cord or wick 22 is passed through a hole 24 in closed end 12 of container 10 and extends towards open end 20 thereof. A portion 26 of wick 22 is tied to

a solid bar 28, which bar extends over or past the edge of open end 20. It should be noted that hole 24 can be tapered towards the open end 20 of container 10 so as to facilitate the passing of wick 22 therethrough. Bar 28 (as shown in FIG. 1) is positioned between each pair of respective pairs of protruding portions 16 and 18 so as to limit the movement of bar 28 in the direction transverse to the axis of bar 28. That portion of wick 22, which extends through hole 24 in closed end 12 of container 10, is pulled so that the part of wick 22, which is located between the open and closed end of container 10, is taut. Once wick 22 has been pulled taut, and bar 28 is pressed against open end 20 of container 10 as shown in FIG. 3, a screw 30, having a head 32 and a shank 34, is fastened to hole 24 in such a manner that shank 34 of screw 30 presses wick 22 against the side of hole 24, and head 34 of screw 30 presses wick 22 against the bottom surface of closed end 12 of container 10. It should be noted that head 32 of screw 30 does not extend outwardly beyond edge 14 of container 10, and thus allows container 10 to stand upright in a stable manner.

Now molten wax, such as paraffin, is poured into container 10. The wax is then allowed to cool and solidify, wherein at least a part of wick 22, which extends between the open and closed ends of container 10, becomes embedded therein. After the wax has solidified and the candle is formed therein, wick 22 is disengaged from bar 28 and closed end 12 of container 10. The formed candle is then removed from container 10.

To facilitate removal of the candle from container 10, besides being tapered as described above, container 10 is made of a slick and pliable type of material such as polyethylene. To further facilitate removal of the formed candle from container 10, the inside of the container can be coated with a lubricant such as mineral oil, vegetable oil or petrolatum. Other types of releasing agents can be used to coat the inner surface of container 10, such as silicone and quilon. The former are organo polysiloxanes and the latter is a stearatochromic chloride made by E.I. DuPont de Nemours & Company, Inc., Grasselli chemical division of Wilmington, Del. In order to increase the adhesion of the release agents to the interior of container 10, the interior thereof can be bombarded with a high voltage or gamma rays.

As shown in FIG. 4, container 10 can have other types of geometric shapes, and in this example the container is again tapered toward the closed end thereof, and has a square cross section.

Not only does the above invention provide for a method of making a candle which has a taut and straight wick, but such a technique of manufacture as described above frees one from the necessity of having to hold the wick over the container while the molten wax is being poured therein.

It should be noted that the container can be translucent so that the exact amount of colored wax, which is being poured therein, can be visually observed by looking at the outside of the container. It should also be noted that, alternatively, the container can be made of other types of material, such as metal.

It is thus seen that there is provided an apparatus for making a candle which achieves the several objects of the invention and is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein described, or shown in the accompanying drawings, is to be interpreted as illustrative and not in a limiting sense.

I claim:

1. Apparatus for making a candle having a wick fixed therein, said apparatus comprising:

A. a unitary container

i. having

a. an open end and

b. a closed end,

ii. said container being tapered from said open end toward said closed end,

iii. said container being formed of plastic,

iv. said plastic being translucent so that molten wax poured therein can be visually observed from the outside of the container,

v. said container having a slick interior surface to facilitate removal of solidified wax therefrom,

vi. said container being pliable to further facilitate removal of solidified wax therefrom, and

B. means including an opening in the closed end of the container and a member bridging the open end of the container for holding a wick extending between said ends of the container so that at least a

part of the wick extends between the open and closed ends of the container and becomes embedded in a candle in the form of solidified wax formed in the container and so that a part of the wick extends beyond the solidified wax.

2. Apparatus according to claim 1 wherein an element is engaged in said opening to close the opening and to captively hold a wick between said element and the walls of said opening.

3. Apparatus according to claim 2 wherein the opening in the closed end tapers toward the open end and wherein the element engaged in said opening is a screw.

4. Apparatus according to claim 1 wherein the bridging member is elongated and wherein the mouth of the container at the open end thereof includes diametrically opposed formations in which the bridging member is received at opposite ends thereof so as to limit movement of the bridging member in a direction transverse to its longitudinal axis.

5. Apparatus according to claim 1 wherein the plastic of which the container is formed is polyethylene.

6. Apparatus according to claim 1 wherein the side walls of the container extend beyond the closed end thereof whereby the closed end is in-set from the bottom edge of the container.

\* \* \* \* \*

30

35

40

45

50

55

60

65