

[54] CANDLE MOLD WITH RESILIENT WICK HOLDER

[76] Inventor: Stuart H. Doig, 1304 Deerpass Rd., Marengo, Ill. 60152

[22] Filed: June 5, 1972

[21] Appl. No.: 259,377

[52] U.S. Cl. 249/97, 425/803

[51] Int. Cl. C11c 5/02

[58] Field of Search 425/803; 249/93, 94, 96, 249/97; 223/102; 112/80

[56] References Cited

UNITED STATES PATENTS

3,799,492 3/1974 O'Laughlin 425/803 X

FOREIGN PATENTS OR APPLICATIONS

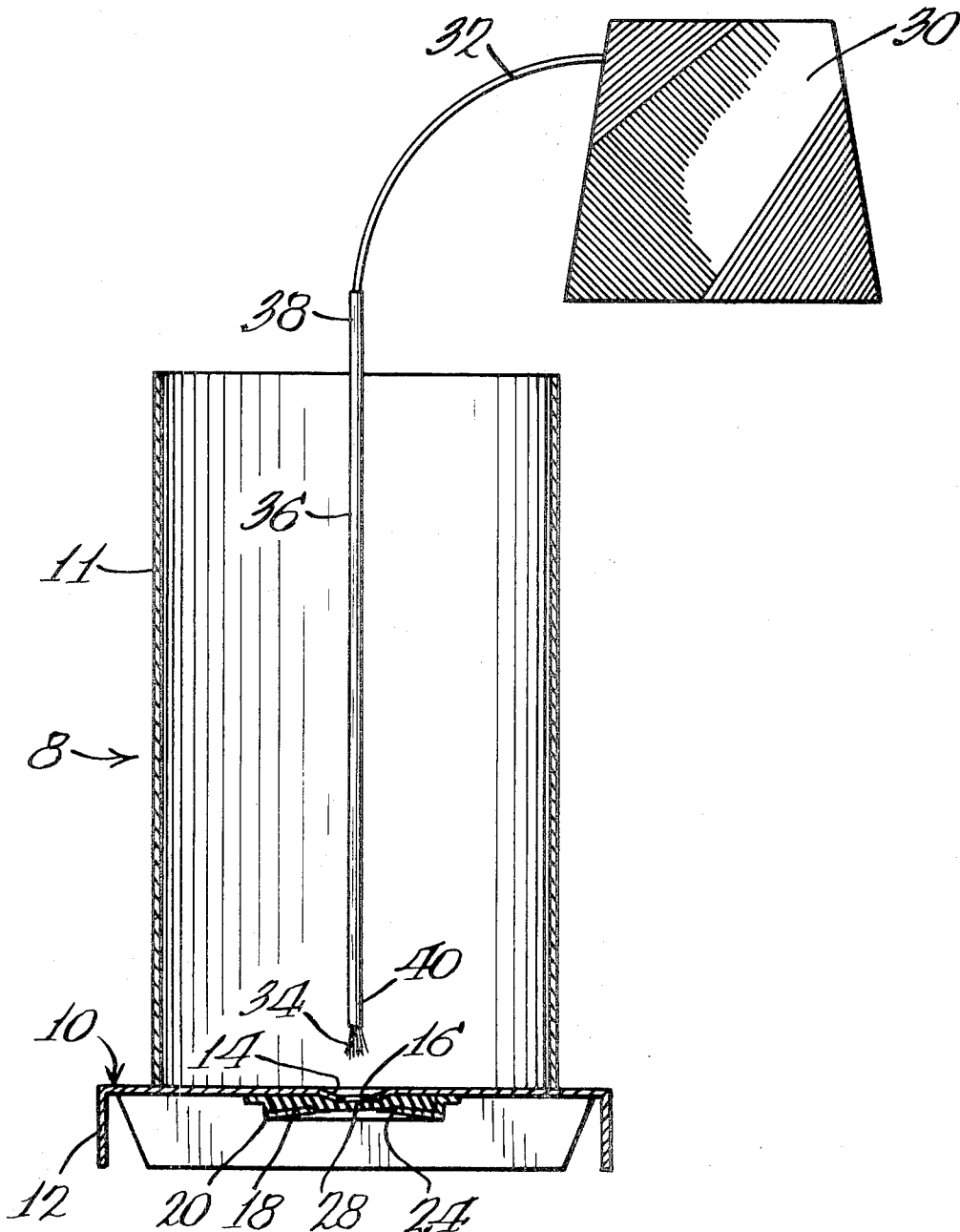
10,148 1901 Great Britain 112/80
366,748 2/1932 Great Britain 112/80

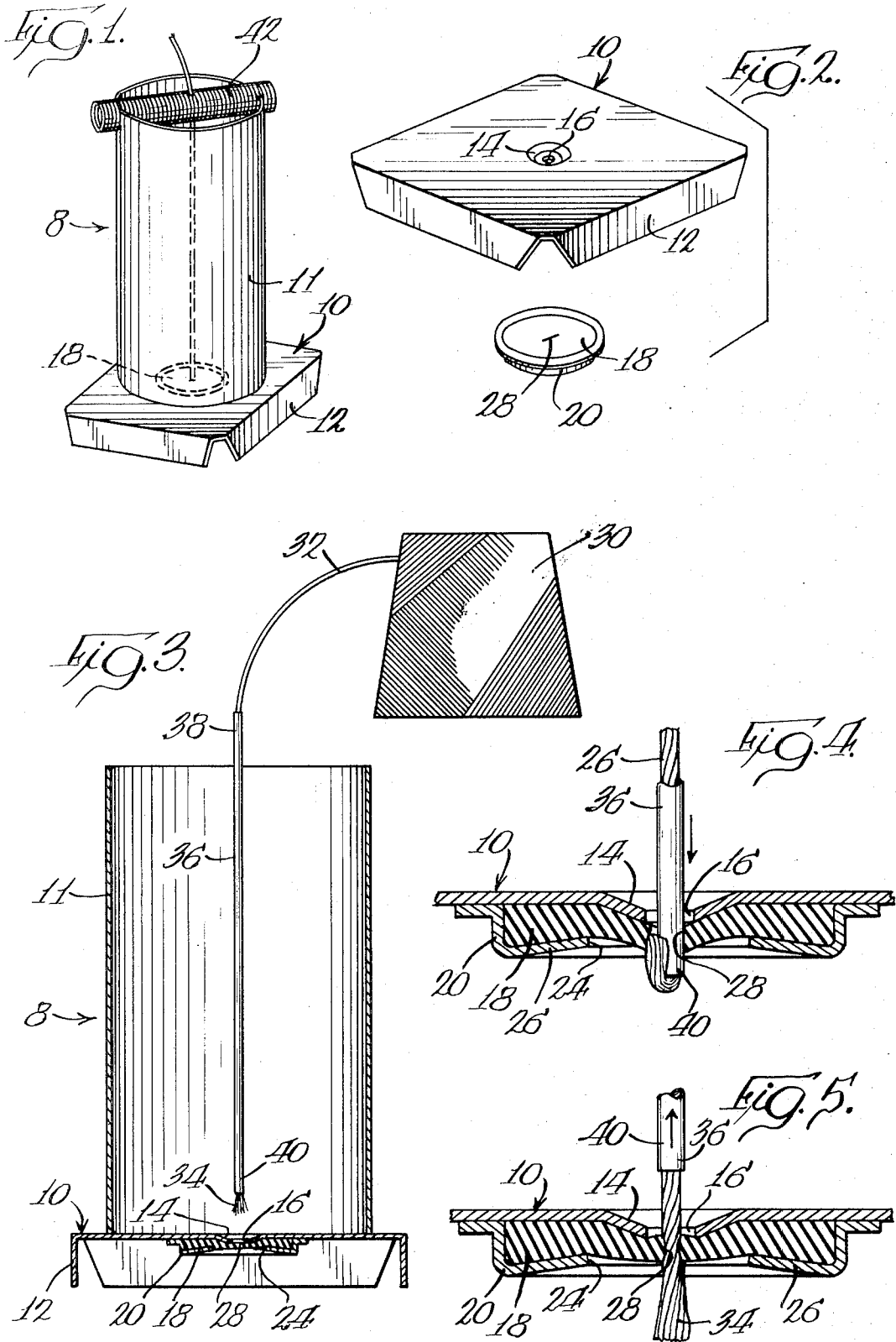
Primary Examiner—Robert D. Baldwin

[57] ABSTRACT

A novel candle mold base to facilitate securing a wick therein including a patch of rubber-like material held against the base plate and having a hole therein adapted to contain one end of a wick resiliently in essentially fluid-tight relationship.

5 Claims, 5 Drawing Figures





CANDLE MOLD WITH RESILIENT WICK HOLDER

BACKGROUND OF THE INVENTION

Candle molds commonly are formed of a flat sheet metal base and square, cylindrical, etc., side walls soldered to the base. Wicking is inserted in a hole in the base and fed through to the open end of the mold where it is tied to a wick bar lying across the mouth of the mold. Thereafter, the wick is drawn tight through the mold base, a retainer screw is screwed into the hole to wedge the wicking tight, and a sealant such as masking tape placed over the screw to prevent leakage.

This process contemplates a constant inversion and reinversion of the molds which often are assembled together in banks, a careful threading of the wick into a hole, and the screw-securing of the wick and the sealing thereof, all of which are tedious and laborious operations.

SUMMARY OF THE INVENTION

This invention contemplates the permanent incorporation of a perforated resilient wick holder in the base of the mold under an easily located hole such that wicking, threaded through a hollow needle, may be easily inserted through the perforation in the wick holder from the open end of the mold, and by retraction of the needle, leave the wick anchored and sealed in the mold base.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a candle mold shown with a wick emplaced;

FIG. 2 is a perspective view of the base of the mold shown with the wick holder detached;

FIG. 3 is a section through the mold of FIG. 1, illustrating the relationship between the mold base, the needle, and the wicking material;

FIG. 4 is an enlarged section through the wick holder illustrating the first step of wick insertion; and

FIG. 5 is a section similar to FIG. 4 illustrating the means of wick retention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In FIG. 1 is shown a candle mold having a base 10 formed of light sheet metal with bent-down edges 12 to space the floor of the mold above the working platform (table, etc). An open topped mold wall 11 is mounted thereon as by soldering. The wall is shown as round but it is evident it may have any cross section according to the taste of the candle maker. The wall may have a slight upward flare to facilitate removal of the cast candle. The base shown is for a single mold, but it will be appreciated that a single large base may serve for many molds, with several mold walls soldered thereto and wick holders to be described below associated with each mold.

Centrally of each mold, the base has a depression or dimple 14 therein with a relatively large hole 16 in the bottom of the depression. A neoprene or rubberlike disk 18 is secured under the depression by a flanged cup-shaped washer 20 conforming in depth and diameter to the disk 18. The flange 22 of the washer is secured to the underside of the base concentrically with the depression and outside it by soldering, epoxy adhesive, etc. The central aperture 24 of the washer is substantially larger than the hole 16 in the depression and

is about equal to the diameter of the depression itself so that the depression bulges the disk downward. The bottom 26 of the cup-shaped washer 20 may be coned slightly upwardly so that the disk is compressed between the washer and mold base to ensure a fluid-tight seal.

The disk 18 has a perforation 28 in the center thereof centered under the hole 16 in the mold base. This may be a small slit, a simple perforation or an actual small hole involving the removal of material. The important characteristic is that its resilient restorative force be sufficient to clamp the wick in non-leaking relationship as wax is poured into the mold. Some wax will be drawn into and beyond the contained portion of the wick by capillarity, but this increment is small enough and slow enough to congeal and self-seal.

It is contemplated that a bulk supply 30 of wicking 32 will be used in conjunction with this invention. The free end 34 of the wicking will be threaded on a hollow needle 36 longer than the depth of the mold. The needle preferably has a slight taper to afford easy passage of the wicking into its upper end 38 but to bind on the wicking slightly at its lower end 40. The hole 16 is proportioned to receive the small end 40 of the needle comfortably but closely.

In FIG. 1 is shown a spring 42 spanning the mouth of the mold 8. The upper end of an inserted length of wicking may be caught between turns of the spring to hold the wick straight and taut during the candle casting. A wick bar may, of course, be optionally employed, but the spring is quick and easy.

The operation of this device is as follows. The needle 36 containing the wicking 32 with about half inch, more or less, of the free wicking end 34 sticking out of the small end 40 is inserted into a mold oriented normally for casting. The depression 14 in the base guides the end of the needle to the hole 16 and to the perforation 28 in the disk 18 underlying it. The needle is pushed through the perforation 28, stretching it with the wick end 34 doubled back on the needle as in FIG. 4 until the wick end clears the disk. At that point the needle is withdrawn. The disk closes on the wick end 34 after the needle has cleared the aperture 28 and grips the wick with substantially greater force than the slight binding of the wick within the small end 40 of the needle. The needle therefore slides up the length of the wicking until it has wholly cleared the mold. The wicking is then cut off about half inch below the needle and slipped into the spring 42 to hold it taut, and the needle is thereupon conditioned for the insertion of another wick into another mold. The resilient squeezing of the disk on the wick makes an effective fluid-tight seal such that no wax leaks past in the process of casting, so no additional sealing is needed.

This invention depends on a gradation of frictions. The needle should bind on the wicking sufficiently to draw it off the bulk supply without slip in the needle and to prevent the wick being pushed back up the needle when the bottom of the mold is met, and the disk should bind on the wicking such that the needle should slip when the wick is held in the disk. It has been found that where a smooth steel needle has not been sufficiently inserted in the disk to carry the end of the wick all the way through the disk, the device is nevertheless effective; the disk seizes the doubled-back wick end but lets the needle slide out, and the disk thereupon seizes the doubled wick.

3

4

Illustratively, the disk may be about one-sixteenth to one-eighth inch thick and about one inch in diameter. The thicker the disk, the larger the hole 16 may be and still achieve good retention of the wick, although this characteristic will also be modified by the inherent stiffness and resilience of the resilient material.

A number of modifications are readily conceivable in the practise of this invention. The depression 14 may be lacking, although it is of great use in locating the hole 16 in a deep and narrow mold. The rubber-like disk 18 may be simply cemented to the under side of the base rather than be retained by the washer 20. The thrust of the needle, however, would throw considerable strain on the cement, particularly in view of the stretchable character of the disk. Means other than a hollow needle for pushing the wick through the disk are conceivable.

I claim:

1. A cast candle mold comprising walls and a base, said base including a base plate, a patch of rubber-like material, and a member holding said patch against said plate in sandwich-like relationship, said patch having a hole therein adapted to contain one end of a wick resili-

ently in essentially fluid-tight relationship, the uppermost as between said plate and said member having a hole therein concentric with said patch hole and larger than said patch hole and the lowermost as between said member and plate having a hole therein concentric with said patch hole substantially larger than said second mentioned hole.

2. The combination of claim 1 wherein said member provides a shallow cup formed and proportioned to contain said patch closely.

3. The combination of claim 2 wherein said member is in the lowermost of said sandwich.

4. The combination of claim 1 wherein said uppermost has a downward depression therein at the bottom of which said hole is situated, said depression bulging said patch downwardly through the hole in said lowermost.

5. The combination of claim 3 wherein said base plate has a depression therein at the bottom of which said hole is situated, said depression bulging said patch downwardly through the hole in said cup.

* * * * *

25

30

35

40

45

50

55

60

65