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CANDLE AND METHOD OF MAKING

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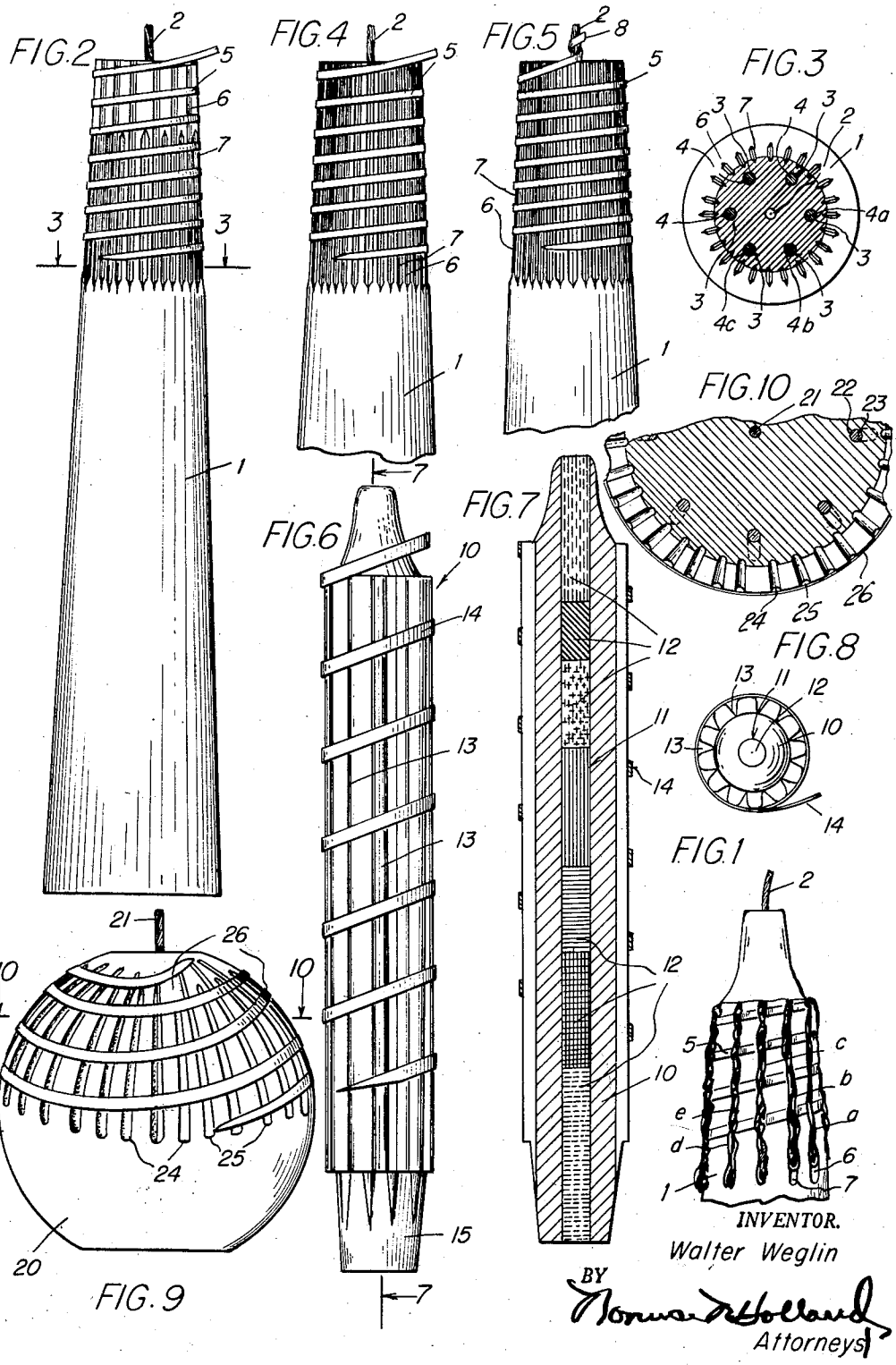

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CANDLE AND METHOD OF MAKING

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The present invention relates to candles and more particularly, to an improved candle adapted to produce polychromatic drippings during burning and to an improved method of making it.

Heretofore, candles have been made which produce polychromatic drippings when burned. However, it has been found that the drippings produced by such candles often tend to mix excessively with each other and to blend the colored drippings so that the original colors of the drippings would be altered beyond the desired amount. It has also been found that such candles would often tend to form drippings in clusters instead of producing uniform drippings.

One object of the present invention is to provide an improved candle adapted to produce polychromatic drippings and an improved method of making it.

Another object of the present invention is to provide a candle for producing colored drippings in which mixing of the colors is controlled to a great extent.

A further object of the present invention is to provide a candle to produce colored drippings in which the drippings are uniform and in which the tendency to form the drippings in clusters is minimized.

A still further object of the present invention is to provide an improved candle of simple manufacture which produces polychromatic drippings and distributes them about the candle exterior in predetermined paths.

Other and further objects of the invention will be obvious upon an understanding of the illustrative embodiment about to be described, or will be indicated in the appended claims, and various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

A preferred embodiment of the invention has been chosen for purposes of illustration and description and is shown in the accompanying drawings, forming a part of the specification, wherein:

Fig. 1 is a fragmentary side elevation of a partially burned candle embodying the present invention showing the colored drippings formed by the burning of the candle;

Fig. 2 is a side elevational view of a candle embodying the present invention showing the finished candle ready for burning;

Fig. 3 is a top sectional view taken along line 3—3 of Fig. 2 showing the positions of the color producing elements within the candle;

Fig. 4 is a fragmentary side elevational view similar to Fig. 2 showing a modification of the candle;

Fig. 5 is a fragmentary side elevational view similar to Fig. 2 showing a second modification of the candle;

Fig. 6 is a side elevational view of another embodiment of the present invention;

Fig. 7 is a side sectional view taken along line 7—7 of Fig. 6 showing the positions of the color producing elements within the candle;

Fig. 8 is a top plan view of the candle shown in Fig. 6 showing the location of the means for starting and guiding the drippings when the candle is burned;

Fig. 9 is a side elevational view showing still another embodiment of applicant's invention; and

Fig. 10 is a top sectional view taken along line 10—10 of Fig. 9 showing the arrangement and disposition of the color producing elements therein.

In Fig. 1 is shown a candle embodying the present invention which has been partially burned. The drippings *a*, *b*, *c*, *d*, and *e* produced may be of any desired colors and are adapted to run down the body of the candle. It will be noted that the drippings are distributed evenly around the candle body and that the drippings are separate and individual. The mixing of colors is controlled and the drippings do not cluster together. The construction of the candle shown in Fig. 1 and method of making it will now be discussed.

Referring more particularly to Figs. 2 and 3, the candle 1 is provided with a central wick 2, as is conventional in the art. A plurality of bores or recesses 3 are disposed in spaced relation to each other around the interior of the candle to accommodate colored materials or pellets 4 therein which will melt when the candle is burned to produce the colored drippings. The pellets 4 are arranged in close adjacency to the exterior of the candle so that when the candle is burned the colored drippings formed by the color pellets will run down the exterior of the candle, as will be more fully described hereinafter. The color pellets 4 have been shown in the drawings as extending lengthwise of the candle and substantially parallel to the exterior of the candle. However, it will be understood that the color pellets 4 can be placed within the candle 1 in any position desired and still come within the purview of the present invention. It will also be noted that the color pellets 4 are shown as being located only in the upper portion of candle 1. However, it will be understood that the color pellets 4 can extend throughout the length of candle 1, as will be more fully explained below.

The candle 1 is usually white colored and each color pellet 4 is usually of a different color to produce polychromatic drippings when the candle is burned. However, if desired, the colored pellets 4 may be of the same color. Also, if desired, the candle 1 may be of one or more colors, for example red on the lower portion and white on the upper portion, so that when the candle is burned the dripping will be white to produce a beautiful contrast with the red colored background of the candle 1.

In order to melt the colored pellets 4 to produce the drippings, a second wick 5 is wrapped around the color pellets 4 on the outside periphery of the candle. The outside wick 5 is wrapped around the candle 1 in spiral relation thereto. Since color pellets 4 are adjacent the outside of the candle, when the outside wick 5 is burned, it will melt the pellets 4 and permit them to drip along the sides of the candle 1, as shown in Fig. 1. Since the candle shown in Figs. 1 and 2 is usually thicker than an ordinary candle, the central wick 2 will melt the central portion of the candle at the same time that outside wick 5 melts the outside portion thereof. This prevents the central portion of the candle from remaining unmelted, which would be undesirable. In the drawings, the outside wick 5 has been shown as being wrapped around the exterior of the candle 1. However, it will be understood that, if desired, the wick 5 can be located within the body of the candle 1 adjacent its exterior. The outside wick 5 has been illustrated as extending over the upper portion only of candle 1. However, it will be understood that the outside wick 5 may extend throughout the body of the candle, if desired. Also, if it is desirable, the outside wick 5 may

extend along the candle for the full length of the color pellets 4, or for a portion of their length. Hence, in the drawings, the color pellets 4 are in the upper portion only of the candle 1 and hence, the outside wick 5 is located in the upper portion thereof. If it is desired for the color pellets 4 to extend below the upper portion of the candle or throughout its entire length, the outside wick 5 may or may not be extended correspondingly to insure complete melting of color pellets 4.

In order to start the melted wax flowing down the candle body to form colored drippings and to guide the colored drippings along the sides of candle 1, a plurality of longitudinally extending flutes or grooves 6 and 7 are provided along the outside periphery of the candle 1. When the drippings are started by the flame of the outside wick 5 burning against a groove at the side of the candle, the color pellets 4 melt in with the drippings and are retained by grooves 6 and 7 and will be guided down the sides of the candle 1, as seen in Fig. 1. The grooves 6 and 7 are of sufficient depth to start the melted wax flowing down the candle body to form colored drippings and to retain and guide the colored droppings. In the drawings, the grooves are shown as parallel to each other and as extending lengthwise of the body of the candle 1. It will be understood, however, that the grooves 6 and 7 need not be parallel to each other and that they can be extended in an arc around the candle 1, if so desired.

In Fig. 2, the grooves 6 and 7 are located in the upper portion of the candle similar to the location of the color pellets 4 and outside wick 5. If the color pellets 4 and outside wick 5 are extended below the upper portion of the candle 1, the grooves 6 and 7 will be extended downwardly to correspond therewith. In Fig. 2, the outside grooves 6 extend to the top of the candle, whereas grooves 7 terminate short of the top. This limits the number of drippings in the early stages of burning and thereby permits the drippings to run farther down the sides of the candle; also, this allows for better uniformity of drippings since it eliminates the possibility of drippings flowing into each other and forming clusters.

When the candle is to be used, the internal wick 2 and the outside wick 5 are ignited in the usual manner. The internal wick 2 will burn in the normal and conventional manner and melt the center portion of the candle. The outside wick 5 will burn the outer edges of the candle and melt the color pellets 4 to produce colored drippings. Since the outside wick 5 is wrapped spirally around the candle 1, the burning of the wick 5 will travel in a spiral path around the candle 1 and will melt each color pellet progressively and permit each dripping to be formed in a groove and run down the candle. For example, as the flame (not shown) moves past a groove 6 in Fig. 3, a color pellet, for example, color pellet 4*a*, which may be green, will melt to form a green dripping, which starts in and runs down groove 6, and as the flame passes color pellets 4*b* and 4*c*, which may be red and blue respectively, the color pellets 4*b* and 4*c* will be progressively melted to form red and blue drippings respectively, which will start in and run down the next succeeding grooves. This progressive melting of the color pellets 4 to produce colored drippings continues spirally around the candle until the entire outside wick 5 has been burned and all the color pellets 4 have been melted. The spaced relation of the color pellets 4 within candle 1, permits each color dripping to run in a groove as soon as it is formed, thereby minimizing the tendency of the color drippings to mix or be formed in clusters.

The drippings formed by the melting of the sides of the candle and the color pellets 4 will be started by the flame of the outside wick 5 coming into contact with grooves 6 and 7 and will be guided downwardly along the sides of the candle 1 by grooves 6 and 7. Since the grooves are deep enough to guide or retain the drippings, the tendency for the drippings to mix with each other will be reduced and the tendency for them to become clustered will be eliminated. As the outside wick 5 melts more of the sides of the candle and the color pellets 4, each dripping will be reenforced by subsequent drippings of the same or different colors to produce the polychromatic decorated candle shown in Fig. 1. Since the grooves 6 and 7 shown in Fig. 2 are staggered, the drippings will start to run down grooves 6 almost immediately after outside wick 5 is ignited, whereas drippings in grooves 7 will begin later. This adds greater length to and spacing of the first drippings that run down grooves 6 and before grooves 7 start drippings in between those formed by groove 6, thereby producing a candle having uniformity of drippings and control over the amount of color blending.

The candle 1 may be formed from any materials now in use for making candles. However, it has been found that the best results are attained by using the following mixture in which the various components are given in terms of weight:

45%—A fatty acid, such as Hystrene
47%—Paraffine wax
6%—A synthetic type of carnauba wax sold by Mitchell Rand Corp. as No. 5115
2%—Carnauba wax

In order to obtain best results, it is preferred that the paraffine wax have a melting point of between 125° and 127° F. The color pellets 4 may be made from the same mixture given above, except that coloring matter is added to each pellet. However, it will be understood that both the color pellets 4 and the candle 1 may be made from any desired wax mixture so long as the mixture used has a melting point and viscosity which will produce colored drippings when melted.

The candle may be made by a molding operation or a dipping operation, as may be desired by those experienced in the art. In either case, the bores 3 are formed in the candle 1 and the color pellets 4 inserted therein. The grooves 6 and 7 are formed on the outside of the candle and the outside wick 5 is then wrapped around the grooves 6 and 7. For best results, it has been found that the outside wick 5 be a wick made of flat loosely woven cotton which is mounted onto the candle by applying heat.

In order to enhance the appearance of the candle and to bond the outside wick 5 to the candle 1, the candle is given a finish dip by dipping it in a mixture of wax. While any conventional wax mixture may be used for this finish dip, it is preferred that the mixture be comprised of 15% stearic acid by weight and 85% paraffine wax by weight, having a melting point of between 125° and 130° F. This gives the candle a smooth finish, gives a low melting point dip which enables the flame to start the drippings almost immediately, and permits the drippings to stick to the candle.

Fig. 4 shows a modification of the candle shown in Figs. 2 and 3. The candle 1 has the central wick 2 and a plurality of internal color pellets (not shown) similar to the color pellets 4 of Fig. 3 to produce the colored drippings. A second wick 5 extends spirally around the outside of the candle to melt the color pellets and form drippings and a plurality of grooves 6 and 7 are provided around the outside of the candle body 1 to start and guide the drippings over the portion with the outside wick 5. In the modification shown in Fig. 4, both of the guiding grooves 6 and 7 extend to the top of candle 1 so that the color drippings will begin to run down all of the grooves in progression to produce a candle in which the drippings occur in rapid succession.

Fig. 5 shows another modification of the candle shown in Figs. 2 and 3. The candle 1 has an internal wick 2 and a plurality of color pellets (not shown) therein to produce the colored drippings. The outside of the candle is provided with grooves 6 and 7 to start and guide the drippings and with a spiral wick 5 extending along its outer periphery to melt the sides of the candle and the color pellets and produce the drippings. In the embodi-

ment shown in Fig. 5, the outside wick **5** and the internal wick **2** are connected to each other on top of the candle, as shown at **8**, so that both wicks can be ignited simultaneously. This saves time and insures proper usage of the candle to produce the desired polychromatic drippings. In Fig. 5, the grooves **6** and **7** have been illustrated as extending to the top of the candle. However, it will be understood that, if desired, the grooves **7** can terminate below the top thereof, as shown in Fig. 2.

The candles shown in Figs. 4 and 5 can be made in accordance with materials and method described in making the candle shown in Figs. 2 and 3, if desired.

Figs. 6, 7, and 8 show another embodiment of the present invention. In this embodiment, the candle **10** does not have a center wick but is provided with a central bore **11** to accommodate a plurality of color pellets **12** in stacked relation to each other which will form colored drippings when melted. A plurality of longitudinally extending grooves **13** are provided around the outside periphery of the candle **10** to start and guide the colored drippings. In the drawings, the grooves **13** are shown as extending throughout the length of the candle **10**, although it will be understood that the grooves **13** need not extend through the full length of the candle, if desired. A wick **14** is wrapped around the outside of the candle **10** in spiral relation thereto so that when the wick is burned, the color pellets **12** will melt and thereby produce colored drippings. The bottom edge **15** of the candle **10** is tapered to permit the candle to be inserted in the neck of a bottle or other object (not shown) so that the colored drippings will accumulate on the bottle or other object to decorate it.

In operation, the outside wick **14** is ignited and as the flame of the wick **14** melts the wax candle **10** and the color pellets **12**, drippings will be formed in the grooves **13** which will progressively run down grooves **13**. The grooves **13** guide the drippings and prevent them from mixing with each other. As the wick **14** burns, the flame passes downwardly from one pellet **12** to the next lowermost pellet. Hence, when the flame is at the topmost pellet **12**, which may be violet or purple, for example, violet drippings will be formed. As the flame reaches the next pellet, which may be colored green, green drippings will be formed to produce a multi-colored decorated candle and/or bottle or other object.

The candle shown in Figs. 6 to 8 may be formed in the same manner and with the same materials with which the candle shown in Figs. 2 and 3 can be made. However, instead of forming spaced internal bores around the periphery of the candle to accommodate spaced color pellets, the candle shown in Figs. 6 to 8 is formed with a central bore **11** to accommodate the color pellets **12** therein in stacked relationship to each other, as shown in Fig. 7.

Figs. 9 and 10 illustrate still another embodiment of the present invention. The form shown in these figures is known as a "snowball" and produces colored drippings which form a multi-colored wax ball for use as a decoration.

The circular candle **20** is in the form of a ball and is provided with a central wick **21**. A plurality of spaced bores **22** are provided therein (Fig. 10) to accommodate colored wax **23** which produces the color drippings. The bores **22** and the colored wax **23** are adjacent the surface of the ball **20** and are curved with the surface of the ball to insure uniform melting of the colored wax. A series of flutes or grooves **24** and **25** are provided along the outside periphery of the ball **20** to start and guide the drippings and an outside wick **26** is wrapped around the outside periphery of the ball **20**. When the wick is ignited the wick will burn in a spiral path around the ball **20** and as the flame passes each groove, it will melt the body of the candle and the colored wax **23** to form a dripping. The dripping will start in grooves **24** or **25** and will be guided by and run down ball **20** to decorate the ball.

In Figs. 9 and 10, the grooves **24** are shown as terminating short of the top and grooves **25** are shown as extending to the top of the ball. However, it will be understood that both grooves **24** and **25** can extend to the top of the ball **20**, if desired. It will also be noted that the wick **21** extends through the wax ball **20** and that the grooves **24—25**, outside wick **26** and colored wax **23**, are confined to the upper half of the ball **20**. If desired, the wick **21** can extend through the ball **20** so as to protrude from the bottom thereof and a second set of grooves, outside wick and color pellets, can be provided on the lower half of the ball so that when one half of the ball is melted, the ball can be reversed and the dripping process begun from the opposite side.

The wax ball shown in Figs. 9 and 10 can be made from the same materials from which the candles shown in Figs. 2 and 3 can be made. The method used for making the wax ball **20** may be any conventional method desired. However, it is preferred that the ball be made by a molding process. Then recesses **22** are formed therein and colored wax **23** deposited in the recesses. Thereafter, the ball is dipped to cover the colored wax **23** with white wax and to build up the ball to the desired diameter. After this operation, the guiding grooves **24** and **25** are formed therein and the outside wick **26** applied thereon. As an alternative, after the recesses **22** for the colored wax **23** are formed, a shell of wax having guide grooves **24** and **25** therein may be placed on the ball and secured thereon by melted wax. If desired, the ball may be then decorated in any desired or conventional manner.

It will be seen from the above that the present invention provides an improved candle which produces polychromatic drippings in which mixing of the drippings is controlled and the tendency to form the drippings in clusters is minimized. The present invention also provides a dripping candle in which the drippings are uniform and are distributed about the candle exterior in predetermined paths.

As various changes may be made in the form, construction and arrangement of the parts herein without departing from the spirit and scope of the invention and without sacrificing any of its advantages, it is to be understood that all matter herein is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim:

1. A combustible candle, said candle being composed of materials adapted to form drippings when burned, a plurality of color materials within said candle adapted to mix with the drippings to form colored drippings, said color materials being located within the candle adjacent the candle exterior in spaced relation to each other, and means on said candle to guide said drippings for at least a portion of the candle length.

2. A combustible candle, said candle being composed of materials adapted to form drippings when burned, a plurality of color materials within said candle adapted to mix with the drippings to form colored drippings, said color materials being located within the candle adjacent the candle exterior in spaced relation to each other, and a plurality of grooves on the exterior of said candle to guide said drippings for at least a portion of the candle length.

3. A combustible candle, said candle being composed of materials adapted to form drippings when burned, a plurality of color materials within said candle adapted to mix with said drippings to form colored drippings, said color materials being located within the candle adjacent the candle exterior in spaced relation to each other, a plurality of grooves on the exterior of said candle to guide said drippings for at least a portion of the candle length, and a wick extending generally spirally around said color materials.

4. A candle as claimed in claim 3, wherein some of said grooves extend to the top of said candle and the remaining grooves terminate short of the top of said candle.

5. A candle as claimed in claim 3, wherein said candle is provided with a central wick and wherein said central wick and said outside wick are joined together above said candle.

6. In a combustible candle, a ball of wax having a plurality of portions of colored wax therein adapted to form colored drippings when the candle is burned, said colored wax being curved coextensive with the curve of said ball, and being located in spaced relation to each other within said ball, a plurality of grooves on the outside of said ball adapted to guide said drippings for at least a portion of said ball, and a wick extending spirally around said colored wax.

7. A combustible candle, said candle being composed of materials adapted to form drippings when burned, the upper portion of said candle having an exterior of a color different from the color of the lower portion thereof, outside wick means on said candle for melting the upper portion of the candle to produce colored drippings, and a plurality of grooves on said candle exterior adapted to guide said drippings for at least a portion of the candle body.

8. A combustible candle, said candle being composed of a major portion of wax material of one color adapted to form drippings when burned and containing a minor portion of material of a different color adapted to mix with said wax material when the latter is burned to form colored drippings, a plurality of grooves on the exterior of said candle adapted to guide said colored drippings for at least a portion of the candle length, and a wick extending around said candle adapted to melt the outside of the candle and to produce said colored drippings.

9. A combustible candle, said candle being composed of material adapted to form drippings when burned, a longitudinal bore in said candle extending for at least a portion of the candle length, a plurality of layers of coloring material in said bore in stacked relation to each other, said coloring material adapted to mix with the candle wax when burned to form colored drippings, a plurality of grooves on the exterior of said candle adapted to guide said drippings for at least a portion of said candle, and a wick extending generally spirally around said candle to melt said candle when burned and form colored drippings.

References Cited in the file of this patent

UNITED STATES PATENTS

1,596,017	Harnisch	Aug. 17, 1926
2,627,174	Weglin	Feb. 3, 1953

OTHER REFERENCES

Emkay Magazine, Catalog Number 50, 32 pages, Syracuse, New York. Only page 20 is needed.