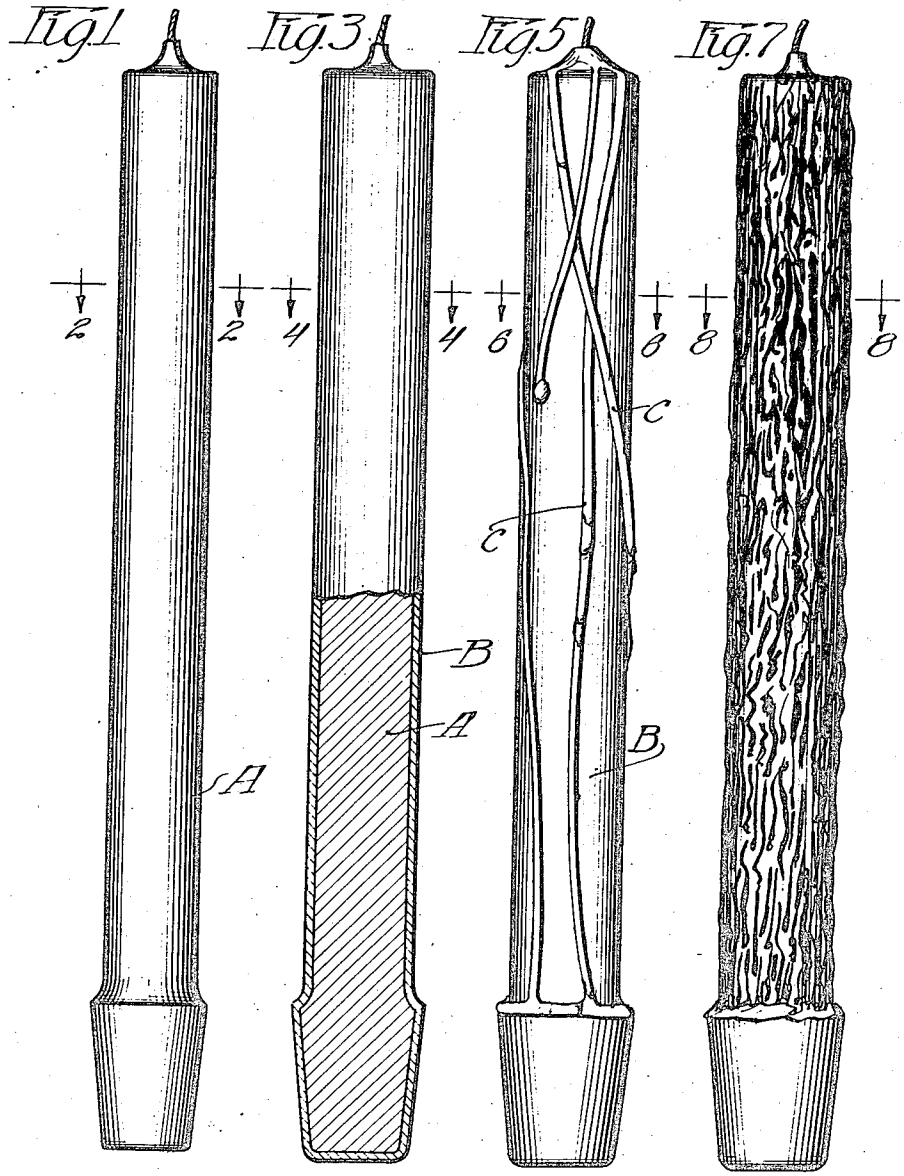
K. V. GAMBELL.

POLYCHROME CANDLE AND METHOD OF MAKING SAME.

APPLICATION FILED APR. 14, 1921.

1,426,174.

Patented Aug. 15, 1922.



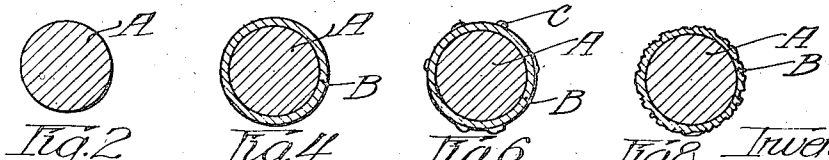




Fig.2 Fig.4 Fig.6 Fig.8

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# UNITED STATES PATENT OFFICE.

KARL V. GAMBELL, OF CHICAGO, ILLINOIS.

## POLYCHROME CANDLE AND METHOD OF MAKING SAME.

1,426,174. Specification of Letters Patent. Patented Aug. 15, 1922.

Application filed April 14, 1921. Serial No. 461,356.

*To all whom it may concern:*

Be it known that I, KARL V. GAMBELL, a citizen of the United States, and resident of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Polychrome Candles and Methods of Making Same, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to the art of candle manufacture, and, broadly stated, the invention contemplates an advance in this art which renders it possible for me to produce an unlimited variety of new and artistic polychrome effects in the manufacture of candles.

Hitherto, the manufacture of a polychrome candle has involved decorating the candle with a number of more or less expensive special paints, stains, or water colors, which have little or no affinity for the wax of which the candle is made, and merely lie upon the wax, and then covering the decorative materials with lacquer, varnish or shellac, to preserve the integrity of the design. The use of lacquer, varnish, shellac or anything of this kind upon the polychrome candle, although necessary prior to my invention, is undesirable for a number of reasons, including particularly the fact that protective coatings of such materials are brittle and inclined to chip, and the further fact that their natural gloss renders it impossible when they are employed to secure certain lack-lustre effects which are deemed extremely desirable in polychrome decoration.

A candle made in accordance with my invention requires no application of lacquer, varnish, or anything of this kind to preserve the decorative design. The polychrome effects are not obtained by giving the candle a mere coat or coats of intermingled paints or stains which are of essentially different composition than the wax which lies beneath them. To the contrary, the materials which I apply to the candle to secure the polychrome effect are wax of the same composition as the candle, the applied waxes being suitably colored with oil pigments which, in the proportions necessary, do not to any appreciable extent change any of the physical characteristics, except the color, of the wax in which they are entrained. The applied wax becomes an integral and inseparable part of the finished candle, and the pigments being in and not merely on the wax of the finished candle require no application of varnish or the like for their preservation.

A description of my improved candle and the method of making the same will doubtless best be understood when read in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of a candle as it appears prior to treatment in accordance with my invention;

Figure 2 is a section on line 2—2 of Figure 1;

Figure 3 is a side view partly in section and partly in elevation, illustrating the candle after it has been subjected to the first step in my decorative method;

Figure 4 is a section on line 4—4 of Figure 3;

Figure 5 is a side elevation of a candle, the decoration of which has been completed;

Figure 6 is a section on line 6—6 of Figure 5;

Figure 7 is a side elevation of a candle, the decoration of which has been completed by certain alternative final steps in my improved method, and

Figure 8 is a section on line 8—8 of Figure 7.

In Figures 1 and 2, I have illustrated a plain candle suitable for my purpose, the said candle being preferably formed of white beeswax. The first step in my method includes mixing a quantity of white beeswax, the same material as that of which the candle is formed, with a suitable oil pigment which will color the wax but will not change the physical characteristics thereof in any very appreciable respect. The pigment employed in this connection is preferably comparatively dark in shade, as, for example, a dark green, and the coloring of the wax is best accomplished by melting it and by adding the pigment until exactly the correct shade of the selected color is obtained. The initially white candle A is now covered to a substantial thickness as indicated at B with the wax prepared as above, the application preferably being made with a soft brush while the applied wax is quite hot. The applied wax becomes an integral and inseparable part of the candle.

A particularly pleasing effect capable of an infinite number of variations is illus-

trated as clearly as is possible in black and white in Figure 5. In order to obtain this effect, I melt white beeswax and suitably color the same, for instance, by thoroughly mixing a silver or bronze colored powder or pigment therewith, while the wax is melted. This wax is now applied while very hot to the top of the candle and is permitted to flow down over the wax jacket B in a plurality of rivulets C. The paths taken by the rivulets are controlled by tilting and turning the candle, and the length of the rivulets may be controlled by manipulating the candle and by determining the quantity and the consistency of the melted wax which is applied to the top of the candle. The light colored rivulets stand out in relief on the darker jacket B and become integral parts of the same.

Exceedingly pleasing and artistic results may be obtained by applying the colored jacket B as previously described, and vigorously brushing the jacket while soft with a stiff bristle brush to scarify it as illustrated in Figures 7 and 8. A wax or waxes having entrained pigments different in color from jacket B are now applied while hot to selected portions of the scarified surfaces of jacket B, a stiff bristle brush preferably being employed for this purpose. When the wax last applied is hardened, I have obtained a polychrome candle in which the colored wax applied to the jacket B intermingles and blends into the coloring of the jacket. The outer surface of the candle is now unevenly scarified. The design may now be improved by applying hot beeswax colored with entrained bronze or silver powder. This last-mentioned wax is preferably applied with a soft brush drawn lightly over the outer surface of the candle so that the bronze or silver colored wax will adhere to the ridges and will not flow down into the depressions between the ridges.

A candle of the class last described similarly to the candle illustrated in Figures 5 and 6 requires no lacquer, varnish, or shellac to protect the candle design. The several pigments are entrained in the successively applied waxes and all of the applied waxes when hardened form a homogeneous mass with the wax of the plain candle which has been treated in accordance with my invention.

Candles constructed and decorated in accordance with the plan of my invention will burn without any disagreeable odor or smoke. This is not true of prior types of polychrome candles which are painted and shellacked as hereinbefore described.

It will be understood that my invention permits a wide variation in the technique employed and the results secured. Since the technique herein specifically described is given merely for the purpose of explanation, it is my desire that the scope of my invention be limited only by the appended claims.

The term "daub" as used in the claims means applying with a brush, sponge, cloth, jet, or other manually controlled means.

What I claim as new and desire to secure by Latters Patent of the United States is:

1. The method of making a homogeneous polychrome candle which consists in jacketing a plain wax candle with an application of hot wax similar in character to that of which the candle is formed, but having a suitable pigment entrained therein, permitting said jacket to harden, applying to the top of the jacketed candle a hot wax similar in character to the wax of the jacket but having a different pigment entrained therein, and causing the wax last applied to run down the cylindrical surface of the jacket in rivulets.

2. The method of decorating a candle which consists in applying to the top thereof a hot wax similar in character to the wax of which the candle is formed, but having entrained therein a suitable pigment differing in color from the candle to which the hot wax is applied and causing the applied wax while hot to run down the cylindrical surface of the candle in a plurality of rivulets.

3. The method which consists of forming a candle body of suitable wax, brushing onto said body while cold a jacket of similar wax having a pigment entrained therein, and applying to the said jacket when cold a covering of wax having a different pigment entrained therein, said covering being arranged to cover only portions of said jacket so as to produce a polychrome candle.

4. The method which consists in jacketing a plain wax candle while cold with an application of hot wax similar in character to that of which the candle is formed but having a suitable pigment entrained therein, permitting said jacket to harden, and applying to said jacket while said candle is freely exposed to the atmosphere a covering of hot wax similar in character to the wax of the jacket but having a different pigment entrained therein, said application being arranged irregularly and unsymmetrically on said jacket so as to produce a homogeneous, variegated polychrome candle.

5. The method which consists of forming a candle body of suitable wax, brushing onto said body while cold a jacket of hot wax having a pigment entrained therein, and applying to said jacket when cold a covering of melted wax having a different pigment entrained therein, said application being arranged irregularly and unsymmetrically on said jacket so as to produce a variegated polychrome candle.

6. The method which consists of forming a plain wax candle, applying to said candle

a jacket of hot wax having a suitable pigment entrained therein, permitting said jacket to cool, and applying thereto while said candle is supported in the atmosphere, an unrestrained covering of hot wax having a different pigment entrained therein, said covering being arranged irregularly and unsymmetrically on said jacket so as to produce a homogeneous, variegated polychrome candle.

In witness whereof, I hereunto subscribe my name this 11th day of April, 1921.

KARL V. GAMBELL.

Witnesses:

ALBIN C. AHLBERG,

EMILE J. BOURGEOIS.