

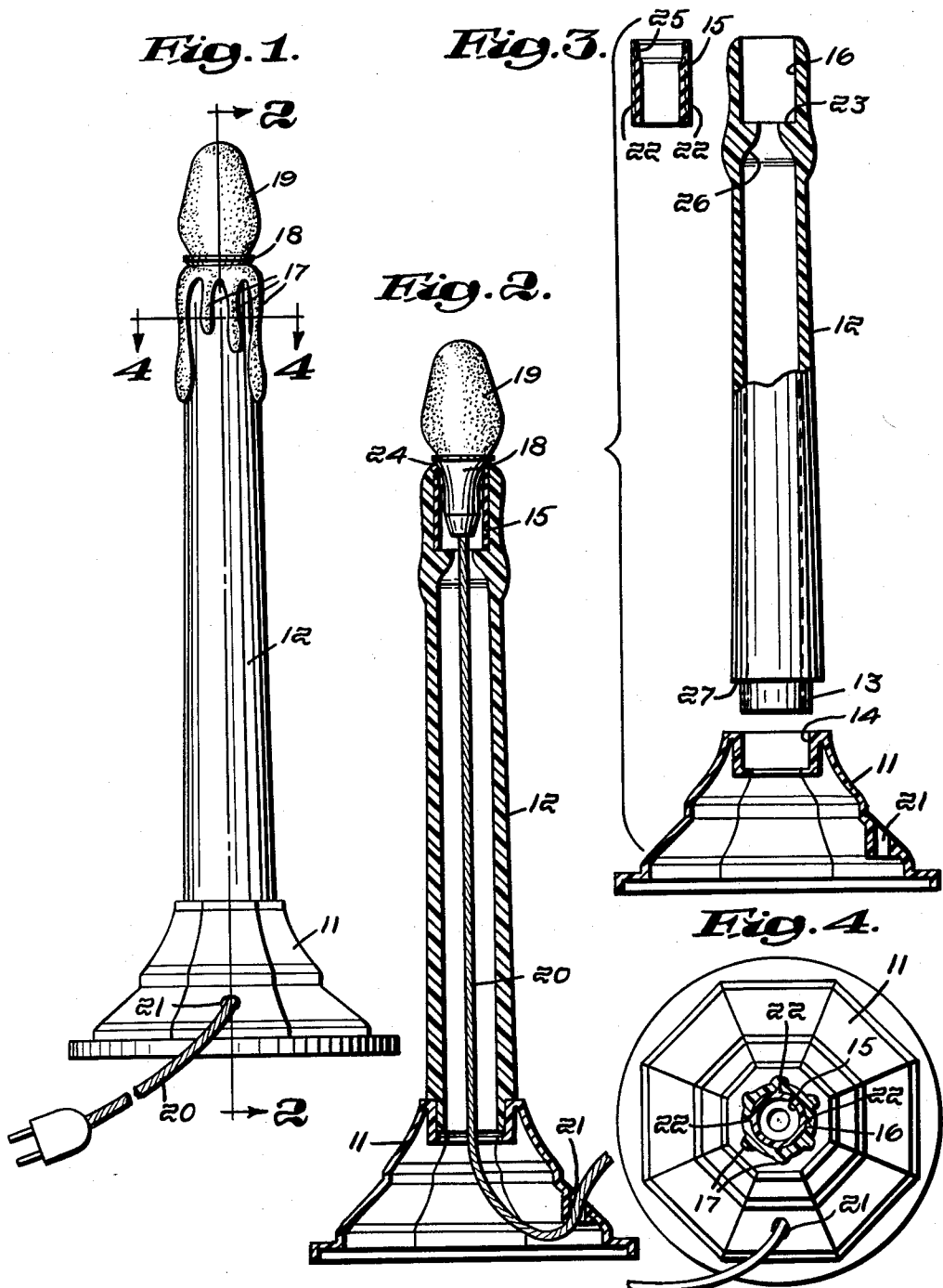
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PLASTIC CANDLE LIGHT

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PLASTIC CANDLE LIGHT

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1 Claim. (Cl. 240—52.4)

This invention relates to electric candle lights of the type commonly employed for decorative use, particularly at Christmas time, either singly or in sets of two or more candles mounted on a common base; and pertains more particularly to plastic tubes and bases used in such candles.

Heretofore, the single candle lights or the candles of multiple light sets have commonly been made of wood or paperboard and comprise a base and one or more tubular candles supporting a small electric light bulb at the upper end of the tube, the base and tube being ornamental and painted or tinted in a decorative manner.

These candle lights present a pleasing appearance when new, but are not durable and soon lose their attractiveness after use and storage because of the inexpensive materials of which they are made and the chipping and soiling of the painted surfaces and ornamentation which must be applied by hand. Metal candle tubes have also been tried, but they are relatively expensive, unnecessarily heavy and less attractive than the cheaper products. They must also be painted, and the surface is subject to soilage or other damage.

Candle lights made of thermoplastic material would be more durable and attractive than those made of wood, paper or metal, and the finish would stand up indefinitely. A candle tube made wholly of thermoplastic material is not permissible, however, for holding an electric light bulb, under the requirements of the Underwriters Laboratories. A thermosetting plastic candle tube would satisfy those requirements, but thermosetting material is relatively expensive, difficult to mold and not obtainable in the colors desired for Christmas decoration in the home.

It is accordingly the principal purpose of this invention to provide a plastic candle light which has a tube and base molded in pleasing and desirable colors of a suitable thermoplastic material, the upper end of the tube having an inserted sleeve of thermosetting material fixed therein and receiving the socket of the lamp bulb. Such a candle light possesses all the colorful, attractive and ornamental characteristics of easily molded and relatively inexpensive thermoplastic material, and also satisfies the safety requirements of the Underwriters, for the bulb socket is fitted in a small sleeve of heat-resistant, thermosetting plastic which is concealed in the top of the thermoplastic tube and preferably held immovable therein.

Further objects of the invention include the provision of unique means for anchoring and concealing the inserted sleeve in the upper end of the molded candle tube, and for attaching the lower end of the tube to the lamp base, which may also be made of molded thermoplastic material of a color which harmonizes or contrasts with the color of the tube.

These and other advantages of the improved plastic candle light will be apparent from the following description of the recommended embodiment of the invention shown in the accompanying drawings, in which:

Fig. 1 is an elevation of a single candle light with the light bulb and cord installed therein:

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Fig. 2 is a section on line 2—2 of Fig. 1, showing the bulb, bulb socket and cord in elevation;

Fig. 3 is an exploded view, partly in section and partly in elevation, illustrating the separated components of the candle light; and

Fig. 4 is a section on line 4—4 of Fig. 1.

In the form chosen for the purpose of illustration, the improved plastic candle light comprises an ornamental, hollow base 11, a tube 12 having a reduced bottom end 13 fitting rigidly in a socket 14 of the base, and a sleeve-like insert 15 received and anchored in the neck 16 at the top of the tube 12. The candle tube and base are separately molded of thermoplastic material such as a suitable polystyrene or acetate. Injection molding is preferable for those elements. The insert 15 is compression molded of thermosetting material such as a suitable phenolic condensation product. Simulated candle drippings 17 may be surface molded around the upper end of the tube 12.

After these parts are assembled as herein described, the lamp socket 18 is press-fitted within the sleeve 15, and receives the bulb 19; and the lamp cord 20 passes downwardly and outwardly through the port 21 thereof. Other ways of feeding the cord into or through the base may be optionally employed.

The phenolic sleeve 15 is preferably formed with a plurality of exterior projections, such as longitudinal ribs 22 (Fig. 4) molded on its surface, so that the sleeve will not turn or twist when inserted into the neck 16 while the thermoplastic material is still soft. The bottom of neck 16 is formed with an interior annular shoulder 23 on which the insert 15 seats, and the relative dimensions are preferably such that the top of the inserted sleeve is spaced approximately $\frac{1}{32}$ inch below the rim of the tube or shell 12, which is flowed or pressed, while soft, over the upper end of the inserted sleeve, as indicated at 24 (Fig. 2), securely to anchor the insert in place. The outer end of the sleeve 15 may have a countersunk bore at 25, for proper wedge fitting of the lamp socket 18 therein.

The reduced lower end 13 of the tube 12 fits snugly in the base socket 14 with the tube shoulder 27 seated on the rim of the socket to which it may be firmly bonded by applying a suitable solvent or cement to the parts before they are pressed together. When so attached, no parting line will be visible between the tube and base, yet these components may be made in contrasting colors if desired.

After the base, candle tube and insert sleeve have thus been united, the lamp cord 20 is preferably threaded through the port 21 of the base, and then upwardly through the tube which preferably has a tapered bore 26 for guiding the cord end past the shoulder 23, and outwardly through the neck 16. The cord wires may then be connected to the lamp socket 18 before the latter is press-fitted into the phenolic insert 15, when the cord 20 may be slightly retracted to assume the position of Fig. 2. The bulb 19 may be applied to the socket whenever desired.

A plastic candle light formed and assembled as herein described furnishes an economical, durable, safe and attractive source of ornamental illumination at Christmas or on other special occasions. The unpainted candle may be handled and stored without marring its color or surface ornamentation; it is light in weight, yet stands steadily on a window sill or ledge; and it lends itself to a variety of pleasing color treatments which are enhanced by the light from a tinted bulb.

As previously indicated, the improved candles may be made singly as herein illustrated, or in sets of two or more attached to a common base. Consequently, the structural details of the candle base may be varied to suit selected installations.

We claim:

A plastic candle light comprising a base, a candle tube of molded thermoplastic material attached to said base, said tube having an internal shoulder adjacent its upper end, and a sleeve of molded thermosetting material disposed in said tube and seated on said shoulder, said sleeve being adapted to receive a light socket and having projections embedded in the tube, and the tube having a flanged-over upper margin engaging and concealing the upper edge of the sleeve.

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