

June 7, 1955

R. R. ROBERTSON ET AL
CANDLE AND ADAPTOR COMBINATION
Original Filed Feb. 10, 1953

2,709,907

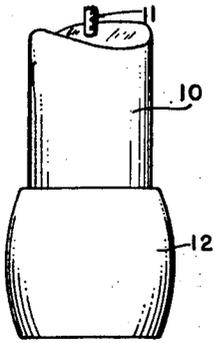


FIG. 1.

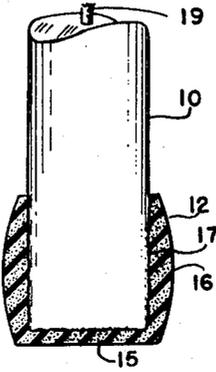


FIG. 2.

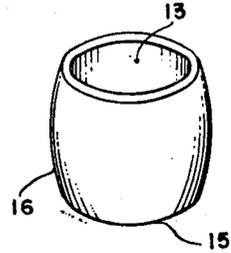


FIG. 3.

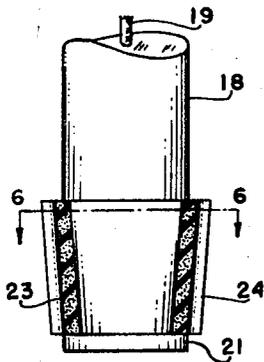


FIG. 4.

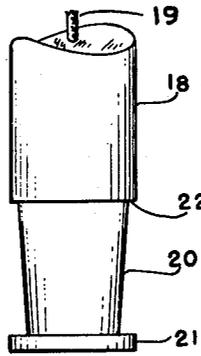


FIG. 5.

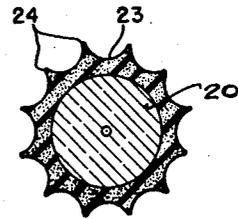


FIG. 6.

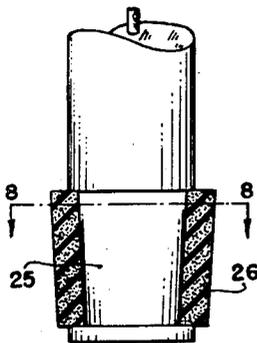


FIG. 7.

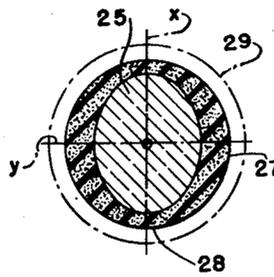


FIG. 8.

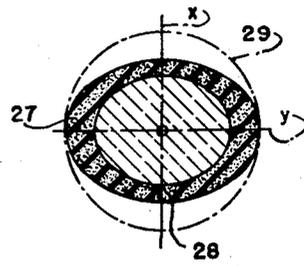


FIG. 9.

INVENTORS:-
REUEL R. ROBERTSON
AMELIA M. ROBERTSON
BY
William F. Sweeney
ATTORNEY

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CANDLE AND ADAPTOR COMBINATION

Reuel R. Robertson and Amelia M. Robertson,
Easton, Pa.

Original application February 10, 1953, Serial No. 336,032. Divided and this application February 24, 1954, Serial No. 412,158

1 Claim. (Cl. 67—22)

This invention relates to candles and particularly to a candle provided at its base or butt end with an adaptor attached thereto in such a manner that the adaptor becomes, in effect, an integral part of the candle structure and is discarded with the remainder of the candle after the latter has burned down to a point adjacent the adaptor.

It is well-known that the sockets of the commonly available candlesticks or holders vary in diameter so that the base end of the conventional candle often fits irregularly the socket of the candlestick or holder to which it is applied. Usually the socket is larger than the candle base so that it is necessary to use various expedients to wedge the candle in the socket. Such expedients often comprise separate wedges made of paper, cardboard or rubber. Sometimes the candle is held in perpendicular position in the holder while the space between the candle base and the side wall of the socket is filled with melted wax, this latter operation requiring considerable time and patience.

According to the present invention, the aforesaid difficulties are obviated by the provision of an adaptor permanently attached to the base end of the candle, which adaptor is made of compressible and distortable resilient material, the material being separate and distinct from the material of which the candle is made. Thus the adaptor and candle are sold as a unit and the adaptor is thrown away with the end of the candle after the latter has burned the normal length of time.

The adaptor projects outwardly beyond the side of the candle base and, being made of compressible, distortable, resilient material, adapts itself automatically to the space between the wall of the socket and the candle proper.

The adaptor is made of rubber, either natural or synthetic, or of any rubberlike material and is so constructed that it may be readily and cheaply molded or, if made according to one of the embodiments described hereafter, may be cut from a continuous length of tubing. In some cases the adaptor may be provided with a plurality of spaced outwardly extending projections or fins on its outer surface, these projections being made of the same material as the adaptor and being flexible enough to be readily distorted. In some of the examples herein described, a candle having a specially shaped butt end is provided.

Other objects and advantages of the invention will be readily apparent from the following description and accompanying drawings wherein:

Fig. 1 is a side elevation of one form of candle and adaptor combination embodying the invention.

Fig. 2 is a view similar to Fig. 1 but showing the adaptor in section.

Fig. 3 is a perspective view of the adaptor used in the combination shown in Figs. 1 and 2.

Fig. 4 is a vertical elevation showing another candle and adaptor combination with the adaptor shown in vertical section.

Fig. 5 is a vertical elevation of the candle shown in Fig. 4.

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Fig. 6 is a section taken approximately on the line 6—6 of Fig. 4, looking in the direction of the arrows.

Fig. 7 is a vertical elevation of a candle and adaptor combination of a different type with the adaptor shown in vertical section.

Fig. 8 is a section taken on line 8—8 of Fig. 7 looking in the direction of the arrows and showing the candle base in one position in the adaptor, and

Fig. 9 is a view similar to Fig. 8 but showing the candle base and adaptor with the candle rotated approximately 90 degrees relative to the adaptor from the position shown in Fig. 8.

Referring to the embodiment shown in Figs. 1 to 3, a candle 10 having a wick 11 has its base received in an adaptor 12. The adaptor, which is shown separately in Fig. 3, comprises a substantially cup-shaped receptacle made of sponge rubber or similar porous material having rubber-like properties of compressibility, distortability and flexibility. The adaptor 12 is provided with a substantially cylindrical centrally disposed opening 13 extending from the top wall 14 of the adaptor to its bottom wall 15, but terminating above the latter. It will be noted that the bottom wall extends across the entire width of the adaptor. Preferably the side wall 16 has a convex outer surface as shown, although in practice it need not be so limited. However, an advantage of this shape is that the lower end of the adaptor is small enough in diameter to enter the candle holder quite easily. Then, as the combination candle and adaptor is pushed down into the holder, the upwardly tapering side wall 16 compresses in the holder and maintains the candle in a substantially perpendicular position.

The opening 13 has a diameter slightly smaller than the base of the candle so that the base is gripped firmly by the adaptor. As an added precaution to prevent inadvertent loss of the adaptor during handling and shipping, advantage is taken of the porosity of the adaptor material to provide an interlocking connection between the candle adaptor and the candle. For example, the base end of the candle may first be dipped in liquified wax before it is inserted into the opening 13, or the base and may be softened by the application of heat either before or after insertion, or a separate adhesive material may be used. In any event the result is a candle having an adaptor of the type described permanently secured to its base portion and which may be sold as a unit. The interlocking between the surface of the candle base and the interior of the adaptor is indicated by numeral 17 in Fig. 2.

It is apparent from the foregoing description that the adaptor 12 could be sold separately and used repeatedly provided it is not integrated permanently with the original candle.

Referring to Figs. 4, 5, and 6, we provide another candle and adaptor combination in which a specially formed candle is used. As shown in Fig. 5, the candle comprises the usual main portion 18 and a centrally disposed wick 19. The base of the candle comprises a stepped-in frusto-conically shaped portion 20 which tapers downwardly and inwardly from the main candle portion 18 to a horizontal flange or disc 21. Portions 18, 20 and disc 21 are made of the usual candle material and are molded integrally. The upper end of base portion 20 is of less diameter than the lower edge 22 of the main candle portion 18 so that what is in effect a recess is formed around the base 20 between the edge 22 and the disc 21.

The adaptor for association with this particular candle comprises a band 23 made of rubber or rubberlike material having the desired properties of compressibility, distortability and resiliency. This band is wide enough to extend around the base portion 20 between the edge 22 and the upper surface of flange or disc 21. This band is

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at least as thick as the recess and may be provided with outwardly extending spaced ribs or projections 24 on its outer surface, or the band itself may be thick enough to extend outwardly beyond the edge 22 and rim of disc 21 in which case the ribs 24 would not be necessary. Also, the band could be made of sponge rubber or like material which can be comprehended easily and which has a roughened outer surface to ensure good contact with the inner surface of the candle holder. In this embodiment it is likewise apparent that the adaptor is permanently associated with the candle.

In the embodiment shown in Figs. 7, 8 and 9, the candle construction is generally similar to that shown in Fig. 5 except that the base portion 25 is non-circular in cross-section. As here shown, this portion is oval and has a longitudinal axis X and a transverse axis Y, the latter being shorter than the former. The adaptor 26 used with this candle has diametrically opposed portions 27 which are thicker in horizontal section than the portions 28 connecting them. This adaptor is fitted initially to the base portion 25 with the thickened portions 27 opposite the termini of axis Y and the thinner portions 28 opposite the termini of the axis X as shown in Fig. 8. When this combination is inserted into a candle holder 29 which is larger in diameter than the adaptor (such a holder being indicated by the broken line 30 in Figs. 8 and 9) the adaptor is grasped at its upper end by the fingers of one hand while the candle and its base portion 25 is rotated approximately 90 degrees by the other hand to the position shown in Fig. 9 wherein the termini of axis X are opposite the thickened portions 27 while the termini of axis Y are opposite the thinner portions 28. Thus the adaptor is distorted so that the outer surfaces of the thickened portion engage the side wall of the holder and maintain the candle firmly in place. It is obvious that the foregoing principle may be applied by providing a non-circular base portion having a shape other than oval and

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that it is only necessary to provide alternate thick and thin sections on the band adaptor to allow distortion of the band by the relative movement of the candle and the adaptor. In this embodiment the candle and adaptor likewise form a permanent combination.

We are aware that it has been proposed to make a candle with a permanently attached adaptor wherein the adaptor is made of wood or metal, and in some cases it has been proposed that the adaptor be slotted to give it resiliency. These constructions are relatively costly and do not easily adapt themselves to ready manufacture or handling. Furthermore, these constructions provide purely mechanical connections between the candle and the adaptor and do not use a material for the adaptor which is inherently resilient, compressible and distortable.

This is a division of our copending application, Serial No. 336,032, filed February 10, 1953.

We claim:

20 A permanently combined candle and adaptor combination designed to be sold as a unit, the candle thereof being provided with a continuous recess around and adjacent its base end, a portion of the candle material being disposed below the adaptor, said portion extending outwardly from the main portion of the candle beneath the lower surface of the adaptor, said recess having a curved outer surface and being non-circular in cross-section, said adaptor comprising a continuous band of the material described having portions of graduated thickness, there being at least two portions thereof thicker than the remaining portions, said thicker portions being separated by thinner portions.

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