

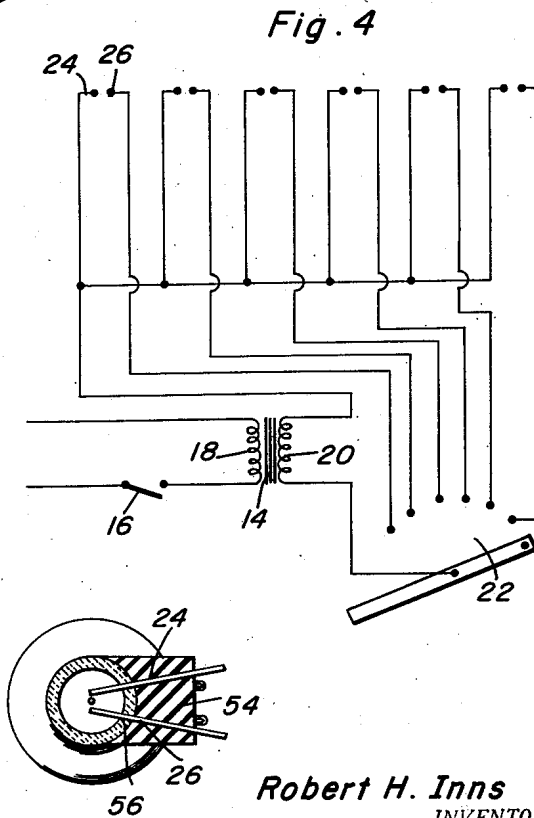
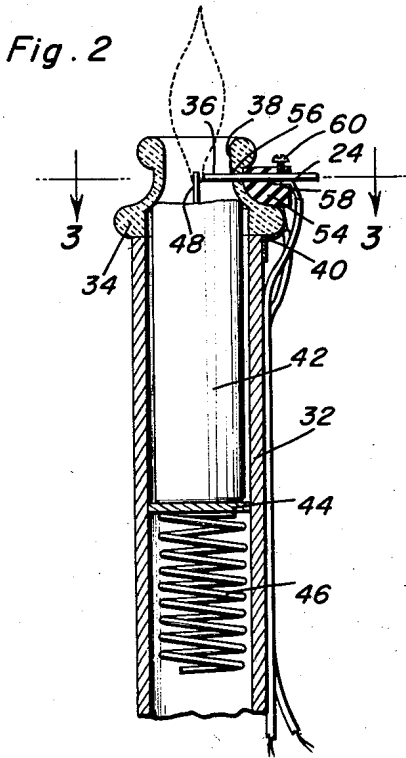
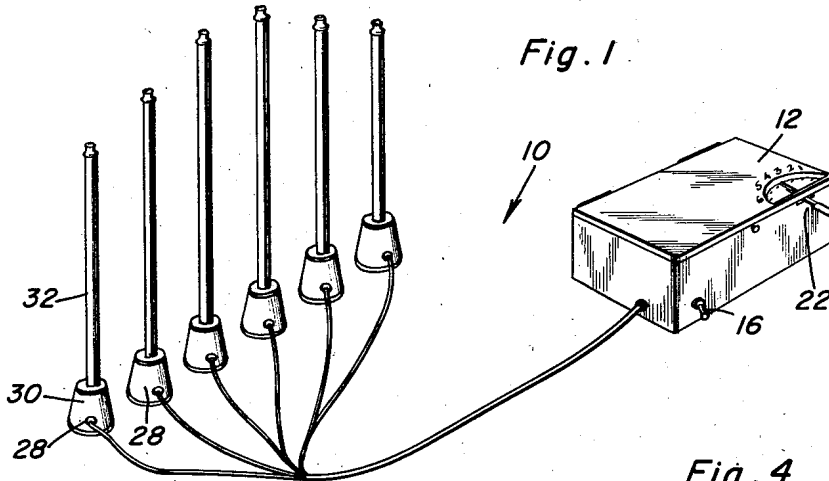
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CANDLE LIGHTER

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CANDLE LIGHTER

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1 Claim. (Cl. 67—3)

This invention relates to means for using high voltage to light wax candles in a convenient and highly effective manner.

The primary object of the present invention resides in the provision of means for reducing the labor necessary to light wax candles such as those used to decorate sacramental altars in churches and other places of worship which are often mounted in rather high and comparatively inaccessible places. Utilized in the invention is means which not only support the candle and hold the wick in a highly desirable position where flame from the candle is always at a desired position but assures that a highly effective display of lighted candles can be achieved with a minimum effort necessary to be used in the lighting thereof.

Still further objects and features of this invention reside in the provision of a candle lighter that is simple in construction, simple to utilize, and which is inexpensive to manufacture thereby permitting wide use and distribution.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are attained by this wax candle lighter, a preferred embodiment of which has been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 illustrates the wax candle lighter comprising the present invention illustrating the rotary switch as mounted in the casing in which the high voltage coil is preferably positioned;

Figure 2 is a vertical sectional view of a portion of one of the candle holders or supports with the electrode thereof in place for lighting a candle;

Figure 3 is a horizontal sectional view as taken along the plane of line 3—3 in Figure 2; and

Figure 4 is a schematic wiring diagram of the electrical components of the invention.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral 10 generally designates the wax candle lighter comprising the present invention. The wax candle lighter includes a casing 12 in which a high voltage transformer 14 is positioned, the high voltage transformer being connected through a manual control switch 16 such as the toggle switch mounted exteriorly of the casing to a suitable source of electrical power through a conventional plug adapted to be connected into any conventional electrical outlet. The transformer has a primary coil 18 and a secondary coil 20 adapted to provide a very high voltage in the order of 10,000 volts for lighting the candles.

Mounted on the casing 12 is a rotary switch 22 which is adapted to connect the potential across the secondary coil 20 to pairs of electrodes as are indicated generally at 24 and 26 for each of the supports for a candle that are utilized. As is shown in Figure 1, individual supports as indicated generally at 28 can be utilized and these tubes include bases 30 having cylindrical tubes 32 rising upwardly therefrom. These tubes may be of any desired height and may be arranged in order to conform to the taste of the user. Each of the tubes 32 has an insulative

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cap 34 formed of porcelain or any other suitable material at the upper ends thereof. The caps 34 have a bore 36 preferably of irregular shape which is constricting with the bore adjacent the top of the cap as at 38 being substantially less than that of the inner diameter of the tube 32. The cap 34 may be hingedly secured as at 40 to the tube 32 whereby the cap 34 can be easily rotated so as to permit a candle 42 positioned in the tube 32 to be easily removed. The candle 42 is supported on a plate 44 continuously urged by a spring 46 to a raised position, the spring 46 engaging a stop either mounted in the tube 32 or in the base 30. The spring 46 urges the plate 44 and hence the candle 42 upwardly until the constricting portion of the bore of the cap 40 holds the candle 42 in position with the wick 48 thereof preferably centered in the bore 36 between a pair of electrodes 24 and 26 carried by an electrode holder 54 and extending through suitable apertures as at 56 in the cap 34. The electrode holder is preferably formed from an electrically insulative material and is provided with suitable slots 58 within which the electrodes 24 and 26 can be moved. Further, the electrodes 24 and 26 can be moved in and out and are held in place as by set-screws 60.

At the lower part of the candle holder each conductor will be provided with a two way connector, not shown, which can be pulled apart at any time desired to wash or paint the holder as may be desired.

In use, the switch 16 may merely be closed after which the rotary switch 22 is rotated to cause a very high voltage to jump across the electrodes 24 and 26 thus lighting the wick 48. Of course, the candles will be successively lighted which may be highly desirable for certain occasions.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

A candle lighter comprising a support for a candle, an electrically insulative cap on said support overlying said candle, an electrode holder on said cap, electrodes adjustably carried by said electrode holder, means for connecting said electrodes to a high voltage source, said support comprising a cylindrical tube, said cap having a bore in alignment with said tube, a candle in said tube, said cap having an upper portion having a bore of reduced diameter, said cap having apertures in said reduced upper portion extending transverse to and communicating with said bore, said electrodes adjustably extending through said apertures in said bore, said candle engaging the upper portion having a bore of reduced diameter holding said candle below said electrodes with said candle having a wick extending upwardly and being disposed between said electrodes, said support further including a plate in said tube, and a spring in said tube urging said plate to a raised position, said spring urging said candle against said upper portion of said cap having a bore of reduced diameter to maintain said wick between said electrodes.

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