Jan. 8, 1924. 1,479,860

G. M. LEWIS

ELECTRIC CANDLE

Filed Jan. 27, 1923

Fig. 1.

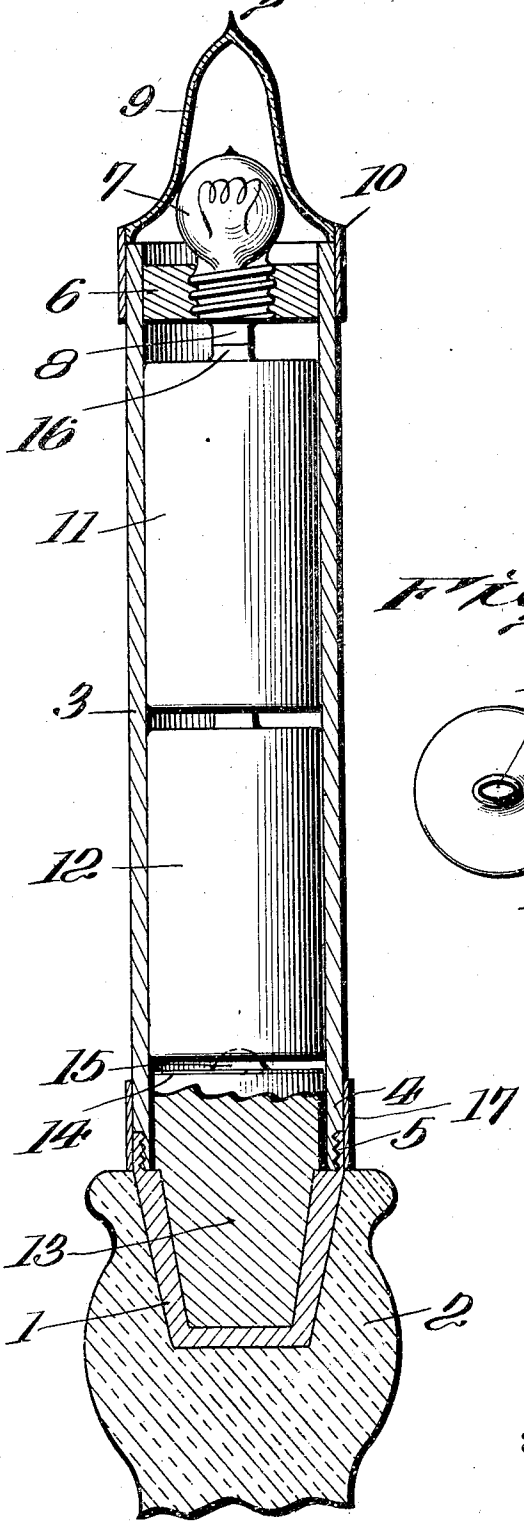
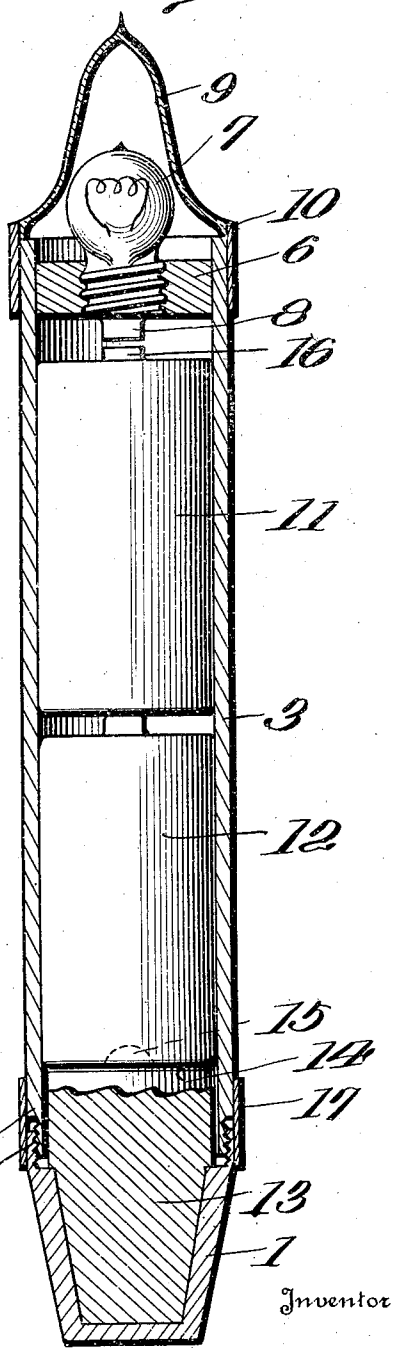


Fig. 3.

Fig. 2.



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UNITED STATES PATENT OFFICE.

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ELECTRIC CANDLE.

Application filed January 27, 1923. Serial No. 615,388.

To all whom it may concern:

Be it known that I, GRACE M. LEWIS, a citizen of the United States, residing at Asbury Park, in the county of Monmouth, State of New Jersey, have invented certain new and useful Improvements in Electric Candles, of which the following is a description, reference being had to the accompanying drawing and to the figures of reference marked thereon.

The invention relates to new and useful improvements in electric candles, and more particularly to an electric candle wherein the current is supplied to the lamp from a storage battery contained within the body portion of the candle.

An object of the invention is to provide a candle of the above type which is entirely free from any projecting switch buttons or the like, and wherein the lamp may be readily connected or disconnected from the battery or batteries by a turning movement of the body portion of the candle relative to the supporting base therefor.

A further object of the invention is to provide a candle of the above type wherein the lamp is fixedly supported by the body portion of the candle and is enclosed by a glass dome.

These and other objects will in part be obvious and will in part be hereinafter more fully disclosed.

In the drawings which show by way of illustration one embodiment of the invention—

Figure 1 is a sectional view through an electric candle embodying my improvements; and a portion of a candle stick in which the candle is supported;

Fig. 2 is a similar view of the candle, but with the parts turned so as to disconnect the battery from the lamp;

Fig. 3 is a plan view of the metal disk on which the batteries rest.

In carrying out the invention, I have provided a candle which includes a supporting base adapted to be fixedly held by a candle stick, or other suitable means and this supporting base carries a tubular body portion which is connected to the base, so that when the tubular body portion is turned on the base it has an endwise movement relative to the base. At the upper end of the tubular body portion there is a support for the lamp and within the tubular body portion is a battery or batteries. The batteries rest on the base and are free to move endwise in the tubular body portion. The lamp is fixed in the tubular body portion and when the tubular body portion is rotated and moved endwise toward or away from the base, it will at the same time move the lamp terminal toward or away from the battery terminal and thus disconnect the light from its source of supply.

The batteries preferably rest upon a metal disk provided with an oblong stud or button which normally fits within a similar shaped recess in the batteries. When the tubular body portion is turned it will turn the batteries as there is sufficient frictional contact between the two for this purpose, although this frictional contact does not prevent the batteries from moving endwise therein. The turning of the batteries on the oblong button will cause the oblong recess to ride up on the surface of the oblong button and raise the batteries from the supporting base and thus further aids in causing the terminal on the battery to engage the terminal on the lamp.

Referring more in detail to the drawings, I have shown my invention as consisting of a candle having a supporting base 1. This supporting base 1 may be made of wood, cork, metal or the like, and the outer wall thereof is so tapered as to fit within the usual recess formed in the outer end of a candle stick, a portion of which is indicated at 2 in the drawings. This outer tapered wall may be fluted or otherwise formed so that when the tapered base is inserted in the candle stick, it will be fixed therein and not easily turnable in the candle stick.

Mounted on this base 1 is a tubular body portion 3 which may be of porcelain, metal, or any other suitable material to simulate a candle. The tubular body portion 3 has an exterior thread 4 which is adapted to engage a thread 5 on the interior of a sleeve

formed as an integral part of the base portion 1. If the tubular body portion 3 is of porcelain, then, of course, it will be provided with a suitable metal liner to serve as a conductor for the current.

At the upper end of the tubular body portion there is a disk 6 which snugly fits within the tubular body portion, and this disk 6 may be of metal or porcelain, or any other suitable material. Said disk has a central opening which is threaded to receive the electric bulb 7 of the usual type. Said electric bulb threads into the opening and its terminal 8 projects below the disk 6. The bulb is of the usual construction and the outer threaded sleeve of the bulb makes electric contact with the metal disk 6. Of course, if this disk 6 is of porcelain, then a metal strip would be used in order to establish a connection between the outer threaded sleeve terminal of the lamp and the metal lining of the tubular body portion.

A suitable dome 9 is provided which is formed with a depending sleeve 10, adapted to make a sliding frictional contact with the outer wall of the tubular body portion. This dome encloses the lamp and is shaped so as to give the general appearance of a candle light.

Mounted within the tubular portion, as shown in the drawings, are two batteries 11 and 12, arranged in endwise relation to each other, as is customary in connection with storage batteries for portable lights. These batteries rest on a member 13 which is supported by the base portion 1, and which projects up into the tubular body portion. This member 13 may be of wood, cork, or the like, and is fixed to the tapered portion 1 of the supporting base so that it does not rotate when the tubular body portion is rotated. Mounted on the upper face of this supporting member 13 is a metal disk 14, which is provided with an oblong button or projection 15. The metal disk makes electric contact with the metal lining or the metal of the tubular body portion 3.

Assume the parts are in the position shown in Fig. 2, it will be noted that the terminal 16 of the upper battery is out of contact with the terminal 8 of the lamp. If the tubular body portion 3 is turned in a clockwise direction, so as to move the body portion downward on the supporting base, it will lower the terminal 3. At the same time it will rotate the batteries relative to the supporting base, and the elongated button which is fixed to the base, so as to cause the corresponding recess in the lower battery 12 to ride up on the wall of the button and raise the two batteries and thus bring the terminals 16 and 8 into contact, as clearly shown in Fig. 1. On the contrary, when the tubular body portion is turned in a counter-clockwise direction, then the threaded parts will turn so as to raise the tubular body portion and raise the lamp and at the same time bring the batteries into position so that the elongated recess will receive the elongated button and the batteries will drop of their own weight down on to the metal disk 14, and this will further aid in disconnecting the two terminals 8 and 16. In order to cover the connection between the tubular body portion and the base, I have provided the metal sleeve 17 which frictionally engages the base, but the tubular body portion turns freely therein.

It is obvious that minor changes in the details of construction and the arrangement of the parts may be made without departing from the spirit of the invention as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. An electric candle comprising a base, a tubular body portion carried by said base, a lamp secured to the upper end of said body portion, a battery freely mounted in said body portion, and means whereby the turning of the body portion on the base in one direction will cause a movement of both the lamp and the battery in opposite directions away from each other for disconnecting the lamp from the battery and will cause said lamp and battery to move both toward each other when the body portion is turned in the opposite direction for connecting the lamp to the battery.

2. An electric candle comprising a base, a tubular body portion, means for connecting said base to said tubular body portion so that the turning of the body portion on the base moves said body portion endwise, a lamp secured to the upper end of said body portion, a battery in said body portion supported by said base and having its terminal adjacent the terminal of the lamp, whereby the turning of the body portion on the base will move said terminal into and out of engagement, an oblong metal projection secured to said base and adapted to engage a similar shaped recess in the battery whereby when said battery is turned relative to the supporting base the walls of the recess therein riding on said projection will raise the battery to aid in establishing a connection between the battery and the lamp.

3. An electric candle comprising a base, a tubular body portion, means for connecting said base to said tubular body portion so that the turning of the body portion on the base moves said body portion endwise, a lamp secured to the upper end of said body portion, a battery in said body portion supported by said base and having its terminal adjacent the terminal of the lamp, where-

by the turning of the body portion on the base will move said terminal into and out of engagement, an oblong metal projection secured to said base and adapted to engage a similar shaped recess in the battery whereby, when said battery is turned relative to the supporting base, the walls of the recess therein riding on said projection will raise the battery to aid in establishing a connection between the battery and the lamp, and a glass dome secured to the body portion and enclosing said lamp.

In testimony whereof, I affix my signature.

GRACE MOYNAN LEWIS.