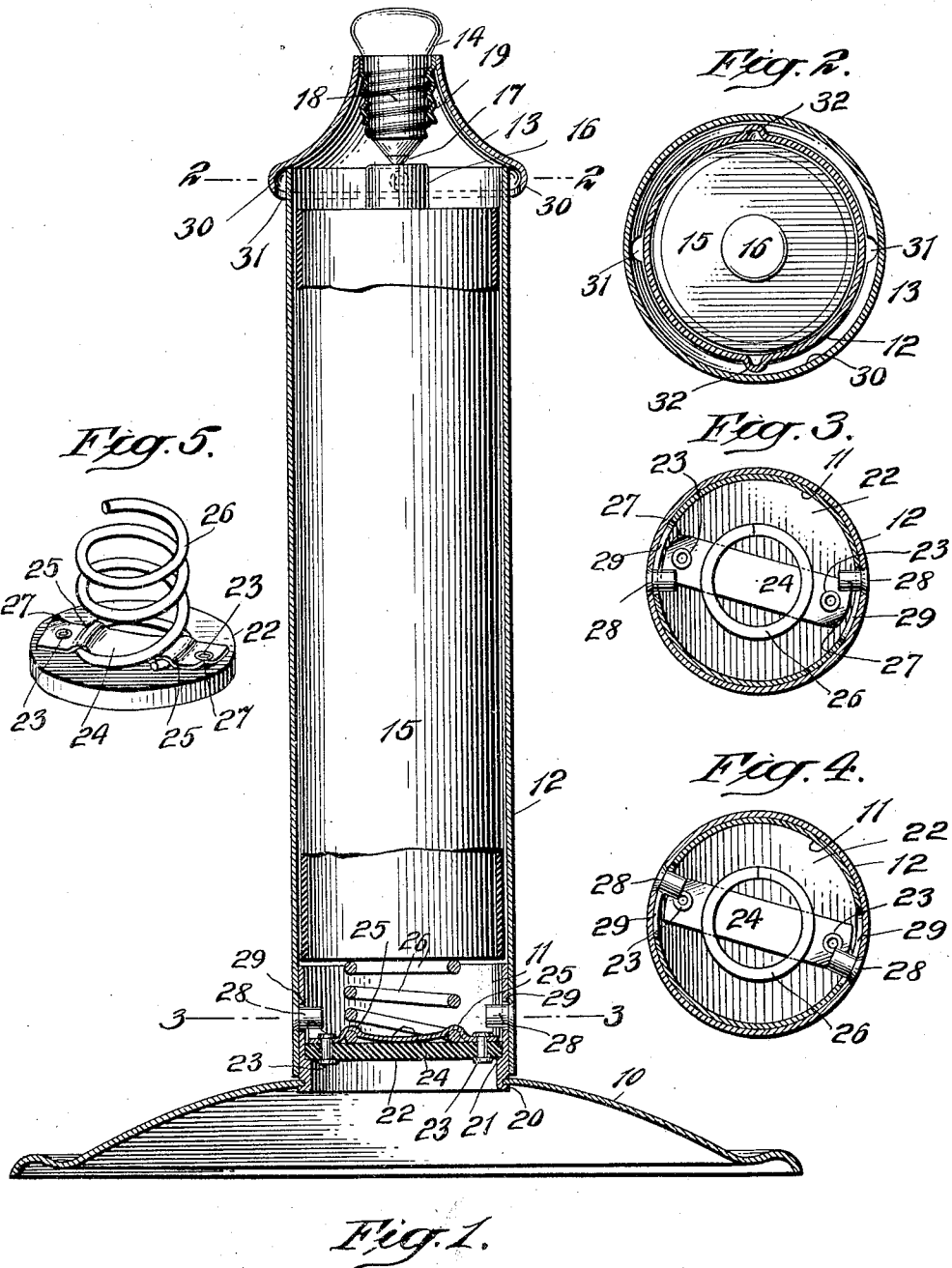


B. BENEDICT.
PORTABLE ELECTRIC LIGHT.
APPLICATION FILED JUNE 17, 1919.

1,335,644.

Patented Mar. 30, 1920.



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PORTABLE ELECTRIC LIGHT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BERNARD BENEDICT, a citizen of the United States, and a resident of Bronx, in the county of Bronx and State of New York, have invented certain new and useful Improvements in Portable Electric Lights, of which the following is a specification.

The invention pertains more particularly to a portable electric light to be placed on a table and utilized as a candle or lamp. Electric lights of this class are ordinarily termed electric candles, and the candle of my invention comprises a base, a tubular sleeve mounted thereon, a tubular casing of candle form mounted on said sleeve and adapted to be turned in one direction to complete the circuit and in the reverse direction to break the circuit, a cap mounted upon the upper end of said casing, a miniature electric lamp mounted in said cap and having its bulb exposed above the same, a battery of usual type within said casing and having its positive pole in electrical connection with the lower end terminal of the lamp, a disk of insulating material in the lower portion of said sleeve above said base, a conducting strip secured upon said disk and normally insulated from said sleeve, and a spring secured upon said disk in engagement with said conducting strip and adapted at its upper end to engage the negative pole of the battery and maintain the positive pole of the battery in engagement with the lamp, the exterior casing having oppositely arranged contact pins adapted on the rotation of the casing in one direction to engage raised portions of said conducting strip for completing the circuit through the lamp and battery.

My invention resides more particularly in the means at the lower end of the candle for making and breaking the circuit, and said invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a central vertical section through an electric candle constructed in accordance with and embodying the invention;

Fig. 2 is a transverse section through the upper portion of the same, taken on the dotted line 2—2 of Fig. 1;

Fig. 3 is a transverse section through a

lower portion of the same, taken on the dotted line 3—3 of Fig. 1;

Fig. 4 is a section corresponding with Fig. 3, but illustrating the relation of the parts after the tubular casing has been turned to complete the circuit, and

Fig. 5 is a perspective view of the insulating disk having a conducting strip and spring secured thereon.

In the drawings, 10 designates a suitable supporting base, 11 a metal sleeve secured thereon, 12 the exterior casing for the candle, 13 a cap mounted on the upper end of the same, 14 the lamp, and 15 the battery whose positive pole 16 is in electrical engagement with the lower terminal 17 of the lamp, while the terminal afforded by the threaded sleeve 18 of the lamp is in electrical engagement with a metal sleeve 19 which is secured within the upper portion of the cap 13 and in electrical connection therewith. The sleeve 11 is formed near its lower end with an annular groove 20 into which the circular edge formed by an opening in the top of the base 10 is sprung for the purpose of securing said sleeve in position, and near its lower end the sleeve 11 is formed with an interior annular shoulder 21 upon which is supported an insulating disk 22. Upon the disk 22 is secured by eyelets or rivets 23 a conducting strip 24, this strip 24 being a reasonably narrow piece of metal which is shorter than the width of the disk 22 so as not to pass into engagement with the metal sleeve 11. The strip 24 is pressed upwardly, as at 25, to form two pockets into which the lower coil of the spring 26 is threaded and which serve to secure said spring upon the disk 22. The strip 24 at diagonally opposite end portions is curved upwardly, as at 27, to form the inclined and spring-like contacts to be engaged by contact pins 28 secured to and carried by the exterior casing 12 and projected inwardly into the chamber formed by the sleeve 11, as shown in Figs. 1, 3 and 4, said sleeve being formed with slots 29 through which said pins 28 project and within which, on the turning of the casing 12, said pins may have movement toward and from the contacts 27 of the conducting strip 24. When the pins 28 are at one end of the slots 29 they are out of engagement with the conducting strip 24, and this is the position in which said pins are illustrated in

in Fig. 3, and when said pins 28 are at the other end of the slots 29, said pins are in engagement with the contacts 27 and complete the circuit. By inclining or curving upwardly the contact points 27, the pins 28 may have a firm riding motion against said contacts and thereby assuredly serve to complete the circuit. The lower end of the casing 12 extends into near relation to the base 10 and its rotary motion is upon the sleeve 11 which snugly fills the lower portion of said casing and affords a chamber for the disk 22, strip 24 and spring 26. The spring 26 engages the lower end or negative pole of the battery 15 and is compressed on the placing in position of the casing 12, said spring pressing upwardly against the battery and serving to firmly hold the casing 12 in fixed relation to the sleeve 11. The pins 28 are fastened to the casing 12 and the expansive effect of the spring 26 is to bind the pins 28 against the upper edges of the slots 29, thus making a firm connection of the casing 12 with its supporting parts. The cap 13 is formed with a beading 30 which encompasses the upper edges of the casing 12 and is formed at opposite points of its lower surface with recesses 31 (Fig. 2), and the upper edge of the casing 12 is formed with outwardly struck up projections 32 of a size adapted to the groove of the beading 30 and to pass through the recesses 31 thereof. When the cap 13 is applied upon the casing 12 it is so turned that its recesses 31 pass into alinement with the projections 32 and then, when the cap is pressed home, it will be turned to carry the recesses 31 from the projections 32 or to the position shown in Fig. 2, said cap becoming thereby locked in position on the casing 12. The battery 15 may, upon the removal of the cap 13, be introduced into the casing 12. The sleeve 19 is rigidly secured to the upper contracted neck portion of the cap 13.

The invention will probably be fully understood from the foregoing description without further minute explanation. When the metal casing 12 is turned to carry the pins 28 from the position shown in Fig. 3 to that illustrated in Fig. 4, said pins will engage the contact points 27 of the strip 24 and complete the circuit through the battery and lamp, the circuit being from the negative pole of the battery through the spring 26, contact strip 24, pins 28, casing 12 and cap 13 to one terminal of the lamp, whose other terminal is in engagement with the positive pole of the battery. When the casing 12 is turned in a reverse direction to carry the pins 28 from the position in which they are shown in Fig. 4 to that illustrated in Fig. 3, said pins will be out of engagement with the conducting strip 24 and the circuit will be broken.

What I claim as my invention and desire to secure by Letters-Patent, is:

1. An electric candle-lamp comprising a supporting base, a sleeve extending upwardly therefrom and secured thereto, an insulating disk in the lower portion of said sleeve, a conductive strip secured upon said disk and having an upwardly projecting portion, a spring supported by said disk and being in electrical connection with said strip, a vertical tubular metal casing rotatably mounted on and secured to said sleeve and having at its upper end a cap and an electric lamp bulb, and a battery within said casing with its negative pole seated on said spring and its positive pole in engagement with the lower terminal of the lamp, said sleeve being slotted at opposite sides, said casing having pins projecting inwardly through said slots and serving, with the slots, to rotatably secure said casing on said sleeve, and one of said pins being adapted to engage the upwardly projecting portion of said strip when said casing is turned to effect that result and the lighting of the lamp.

2. An electric candle-lamp comprising a supporting base, a sleeve extending upwardly therefrom and secured thereto, an insulating disk in the lower portion of said sleeve, a conductive strip secured upon said disk and having an upwardly projecting portion, a spring supported by said disk and being in electrical connection with said strip, a vertical tubular metal casing rotatably mounted on and secured to said sleeve and having at its upper end a cap and an electric lamp bulb, and a battery within said casing with its negative pole seated on said spring and its positive pole in engagement with the lower terminal of the lamp, said sleeve being slotted at opposite sides, said casing having pins projecting inwardly through said slots and serving, with the slots, to rotatably secure said casing on said sleeve, one of said pins being adapted to engage the upwardly projecting portion of said strip when said casing is turned to effect that result and the lighting of the lamp, and said strip having pockets receiving opposite portions of the lower coil of said spring and serving thereby to secure said spring on said disk.

3. An electric candle-lamp comprising a supporting base, a sleeve extending upwardly therefrom and secured thereto, an insulating disk in the lower portion of said sleeve, a conductive strip secured upon said disk and having upwardly projecting outer opposite portions, a spring supported by said disk and being in electrical connection with said strip, a vertical tubular metal casing rotatably mounted on and secured to said sleeve and having at its upper end a cap and an electric lamp bulb, and a battery

within said casing with its negative pole seated on said spring and its positive pole in engagement with the lower terminal of the lamp, said sleeve being slotted at opposite sides, said casing having pins projecting inwardly through said slots and serving, with the slots, to rotatably secure said casing on said sleeve, and said pins being adapted to engage said upwardly projecting portions of said strip when said casing is turned to effect that result and the lighting of the lamp.

4. An electric candle-lamp comprising a supporting base, a sleeve extending upwardly therefrom and secured thereto, an insulating disk in the lower portion of said sleeve, a conductive strip secured upon said disk and having upwardly projecting outer opposite portions, a spring supported by said disk and being in electrical connection with said strip, a vertical tubular metal casing rotatably mounted on and secured to said sleeve and having at its upper end a cap and an electric lamp bulb, and a bat-

tery within said casing with its negative pole seated on said spring and its positive pole in engagement with the lower terminal of the lamp, said sleeve being slotted at opposite sides, said casing having pins projecting inwardly through said slots and serving, with the slots, to rotatably secure said casing on said sleeve, said pins being adapted to engage said upwardly projecting portions of said strip when said casing is turned to effect that result and the lighting of the lamp, and said portions of said strip being integral therewith and consisting of parts thereof bent upwardly at diagonally opposite corners of the ends of the strip to form inclined contacts.

Signed at New York city, in the county of New York and State of New York, this 13th day of June, A. D. 1919.

BERNARD BENEDICT.

Witnesses:

ARTHUR MARION,
CHAS. C. GILL.