April 10, 1928. 1,665,867

C. WACHTEL

ELECTRIC BOUDOIR LAMP

Filed Nov. 18, 1924

Fig.1.

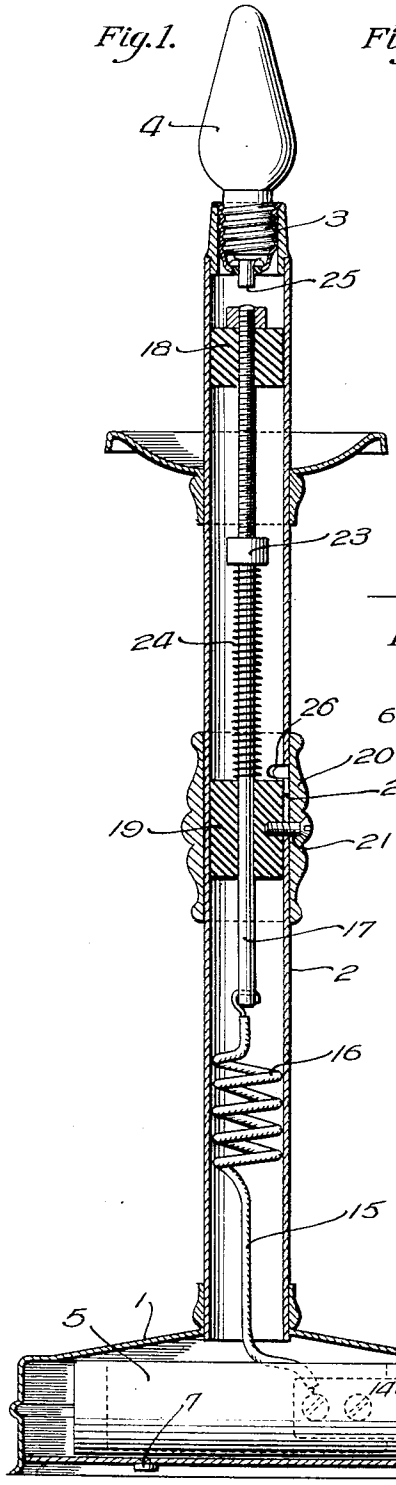


Fig.2.

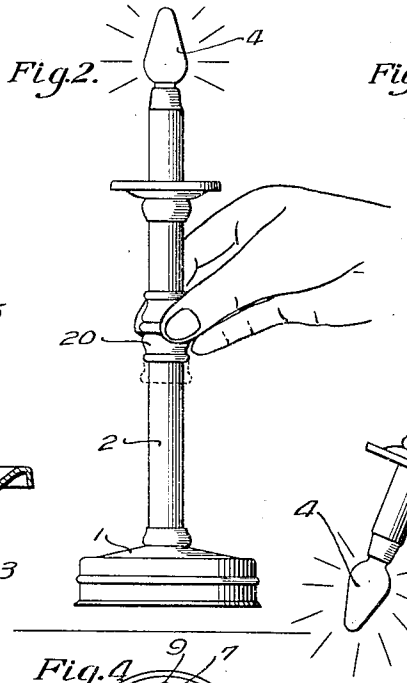


Fig.3.

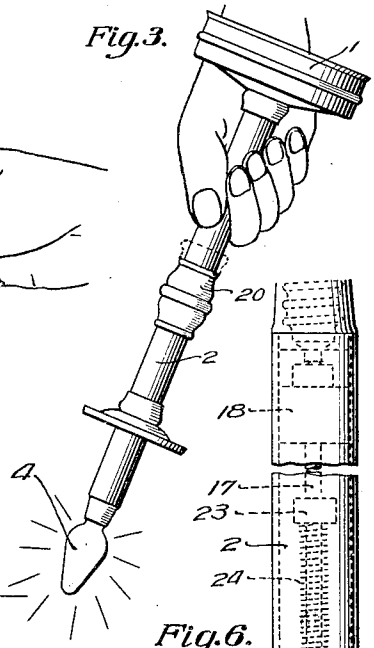


Fig.4

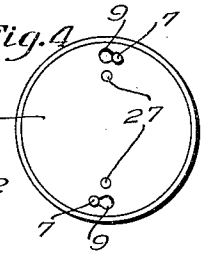


Fig.6.

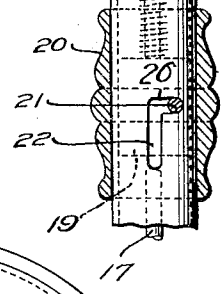
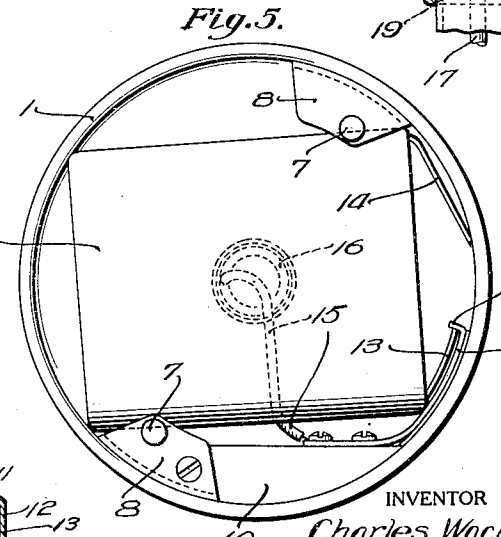


Fig.5.



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Patented Apr. 10, 1928. 1,665,867

UNITED STATES PATENT OFFICE.

CHARLES WACHTEL, OF NEW HYDE PARK, NEW YORK.

ELECTRIC BOUDOIR LAMP.

Application filed November 18, 1924. Serial No. 750,602.

One of the principal objects of this invention is to provide a small ornamental and readily portable self contained electric lamp adapted for household use.

Another important object of the invention is to provide a small portable self contained electric lamp with means whereby the lamp circuit will be interrupted when the lamp is released by the hand and placed on a table or other support, and will be complete or closed when the lamp is lifted by grasping it at a certain point.

Another object of the invention is to provide means whereby the lamp circuit may be permanently closed so that it will not be affected when the lamp is released by the hand and placed on a table or support.

Still another object is to provide means whereby the lamp circuit will be automatically closed, to provide illumination, when the lamp is inverted.

The lamp is illustrated in the drawings in the form of a candle stick, but of course it will be understood that it may be made up in any suitable form.

In the drawings, Fig. 1 is a vertical section through the lamp;

Fig. 2 a side elevation showing the lamp being lifted from a support;

Fig. 3 a side elevation showing the lamp inverted;

Fig. 4 a bottom plan view of the lamp;

Fig. 5 a similar view upon a larger scale, showing the battery retaining plate removed; and

Fig. 6 a fragmentary side elevation of the lamp standard, parts being shown in section.

Referring to the parts by numerals, 1 designates the base of the lamp which is hollow and in the form of a wide, flat, inverted cup. A straight, tubular standard 2 is rigidly supported by the base and has a lamp socket 3 mounted in any suitable manner at its upper end. The socket 3 is adapted to have the plug of an electric lamp bulb 4 threaded into it. A flat electric battery 5 is located within the hollow base of the lamp and is held therein by a retaining plate 6 which closes the under side of the base. The plate 6 is held in place by means of a pair of diametrically located studs 7 carried by brackets 8 which are secured within the base. The studs 7 are formed with heads and with reduced portions or necks which reduced portions are adapted to engage in the reduced ends of a pair of key slots 9 formed in the retaining plate.

A block of insulation 10 is secured within the base at one side of the battery and has a fixed contact 11 mounted thereon. This contact is in the form of a metal strip insulated from the lamp base and inturned at its free end as at 12 to form an abutment. One of the contacts 13 of the battery is adapted to abut the shoulder 12 of the fixed contact 11 and the other battery contact 14 bears against the inner wall of the base. The corners of the battery fit snugly within the lamp base and the contacts are thereby held firmly in their proper positions. A circuit wire 15 is connected to the fixed contact, leads upwardly into the tubular standard and is coiled as at 16. The upper end of the wire 15 is connected to the lower end of a brass rod 17 which extends upwardly within the standard. A cylindrical insulation plug 18 is secured to the rod 17 adjacent its upper end and the lower end of the rod is extended through a similar insulation plug 19. The plug 19 is slidable over the rod 17 and both plugs are freely slidable within the standard and serve as guides for the rod 17 and to hold it out of contact with the standard.

A lifting and circuit closing sleeve 20 encircles and is adapted to slide upon the outside of the standard 2. A screw 21 extends inwardly from the sleeve 20 and through a vertically extending slot 22 formed in the standard and said screw is threaded into the plug 19 to lock said plug to the sleeve 20. The rod 17 is formed with a thread extending down from its upper end for a material distance and the plug 18 is screwed thereon. Below the plug 18 a collar 23 is threaded upon the rod 17 and serves as an adjustable abutment for a coiled spring 24 which encircles the rod and is interposed between the said collar and the plug 19. In the usual position of the sleeve 20 and plug 19, the screw 21 rests in the lower end of the vertical slot 22. In this position of the sleeve, the rod 17 is supported by the plug 19 and the spring 24 in its lowermost position as shown in Fig. 1. The upper end of the rod 17 constitutes a movable contact, and in line with the rod is a fixed contact 25 which is mounted in the lamp socket but insulated

therefrom and adapted to be engaged by the central pole of the lamp bulb. The weight of the rod and its connected parts causes the rod to normally assume the position shown in Fig. 1. The upper end of the rod is then spaced from the fixed contact and the lamp circuit, presently to be described, is broken.

The sleeve 20 is of a proper size and shape and is so located on the standard as to provide a convenient handle to be grasped for lifting and carrying the lamp. When the lifting force is first exerted upon the sleeve it is moved upwardly and carries the plug 19 with it. The plug 19 through the means of the spring 24 and collar 23 raises the rod 17 into contact with the fixed lamp contact 25. An electrical circuit from the battery to the lamp is thus closed. The current flows through the battery contact 13, the fixed contact 11, wire 15, rod 17, fixed contact 25, the lamp 4, the lamp plug and socket, the standard and base of the lamp, (both of which are formed of conducting material) and through the battery contact 14. The weight of the lamp will hold the circuit closed while it is being held or carried by means of the sleeve. When the lamp is placed upon a support and the sleeve is released, the sleeve and the contact rod will gravitate to their lower positions and automatically open the circuit. The slot 22 in the standard, through which the screw 21 extends, is formed with a lateral branch 26 at its upper end and when permanent illumination is desired the sleeve 20 is moved up to the limit of its movement upon the standard against the resistance of the spring 24 and is then rotated upon the standard to engage the screw 21 within the branch slot 26. The sleeve and the contact rod are thus locked in circuit closing position, as shown in Fig. 6, and may be released by merely rotating the sleeve back to disengage the screw from the branch slot. The tension of spring 24 may be adjusted by means of the collar 23 so that in merely lifting and carrying the lamp the sleeve will not move upward sufficiently to bring the screw in line with the branch slot 26. This ensures that the sleeve will not be accidentally locked up in circuit closing position. In order to lock the sleeve it is pushed upwardly upon the standard a little further against the spring resistance until the screw registers with the branch slot.

The lamp circuit is also adapted to be closed automatically by merely inverting the lamp as shown in Fig. 2. The contact rod 17 and the sleeve 20, then, both gravitate to circuit closing position. This feature is an advantage when it is desired to direct the light rays upon the floor as when searching for lost articles. The sleeve 20 preferably possesses considerable weight so that it will quickly slide upon the standard when the lamp is inverted and thereby accelerate the closing of the circuit and will also quickly move to normal position when the lamp is placed upon a support.

The lamp is preferably made in the convenient form of a candlestick with a slender standard and a wide flat base. The battery and the contact rod with its connected parts are all adapted to be inserted or removed through the under side of the base. To give access to the base it is merely necessary to slightly rotate the retaining plate 6 by means of short studs 27 to disengage the locking studs 7 from the key slots 9. The plate may then be lifted from the base. The tubular standard opens at its lower end directly into the hollow base and the contact rod with the plugs thereon may be easily inserted or removed therethrough. The contact rod and plugs may be released from the standard by merely withdrawing the screw 21 from the plug 19.

What I claim is:

1. An electric lamp comprising a slender tubular standard, a hollow base supporting the standard, a lamp socket carried by the upper end of the standard, a battery located within the base, means forming a normally open electrical circuit from the battery to the lamp socket, a sleeve encircling the standard and adapted to be grasped to lift the lamp, said sleeve being adapted to slide upwardly toward the lamp socket a limited distance when a lifting force is exerted thereon, reciprocable circuit closing means within the tubular standard, a yieldable operative connection between the sleeve and said means to close the circuit when the sleeve is shifted toward the lamp socket, and means to lock the sleeve in circuit closing position, said circuit closing means and sleeve being adapted to gravitate to circuit opening position when the sleeve is released.

2. An electric lamp comprising a tubular standard, a source of electric current, a circuit wire connected to the source of current and extending upwardly into the tubular standard, a movable contact rod connected to said wire and extending upwardly within the standard, a lower guiding and insulating plug surrounding the contact rod adjacent its lower end, an upper guiding and insulating plug secured to the contact rod adjacent its upper end, an abutment on the rod between said plugs, a compression spring interposed between said abutment and the lower plug, both of said plugs being freely slidable within the standard, a lamp socket carried by the upper end of the standard, a lifting and circuit closing sleeve encircling and freely slidable over the outer side of the standard, the standard being formed with a vertical slot having a lateral branch at its upper end, and a pin connecting the sleeve and the said lower plug through the said slot, the sleeve being adapted to be

grasped for lifting the lamp and adapted when a lifting force is exerted thereon to move upwardly on the standard and yieldingly lift the contact rod to make an electrical connection with a lamp plug in the lamp socket.

3. An electric lamp comprising a slender tubular standard, a hollow base supporting the standard, a lamp socket carried by the upper end of the standard, a battery located within the base, means forming a normally open electrical circuit from the battery to the lamp socket, a slidable member mounted upon the exterior of the standard and adapted to be grasped to lift the lamp, said member being adapted to slide upwardly toward the lamp socket a limited distance when a lifting force is exerted thereon, reciprocable circuit closing means within the tubular standard, connected to the slidable member for movement with it and adapted to close the circuit when said member is shifted toward the lamp socket, means operable by a rotation of the slidable member to lock the said member in circuit closing position, and resilient means to yieldably hold the said circuit closing means in a position to close the circuit when the slidable member is locked, the circuit closing means and slidable member being adapted to gravitate and open the circuit when the member is released.

4. In an electric lamp, a slender tubular standard, a base supporting said standard, a lamp socket carried by the standard, means forming a normally open electrical circuit including the lamp socket, an operating member mounted upon the exterior of the standard for free sliding movement longitudinally thereof a material distance above the base to adapt the standard to be grasped between the base and the operating member, said member being also formed to be grasped to lift the lamp, freely reciprocable circuit closing means within the standard adapted to close the lamp circuit when moved toward the socket, and an operative connection between the circuit closing means and the operating member, whereby when the lamp is lifted by grasping the operating member the circuit closing means will be manually moved to close the circuit and when the standard is grasped below the operating member and inverted the said member and means will gravitate to close the circuit.

In testimony whereof I hereunto affix my signature.

CHARLES WACHTEL.