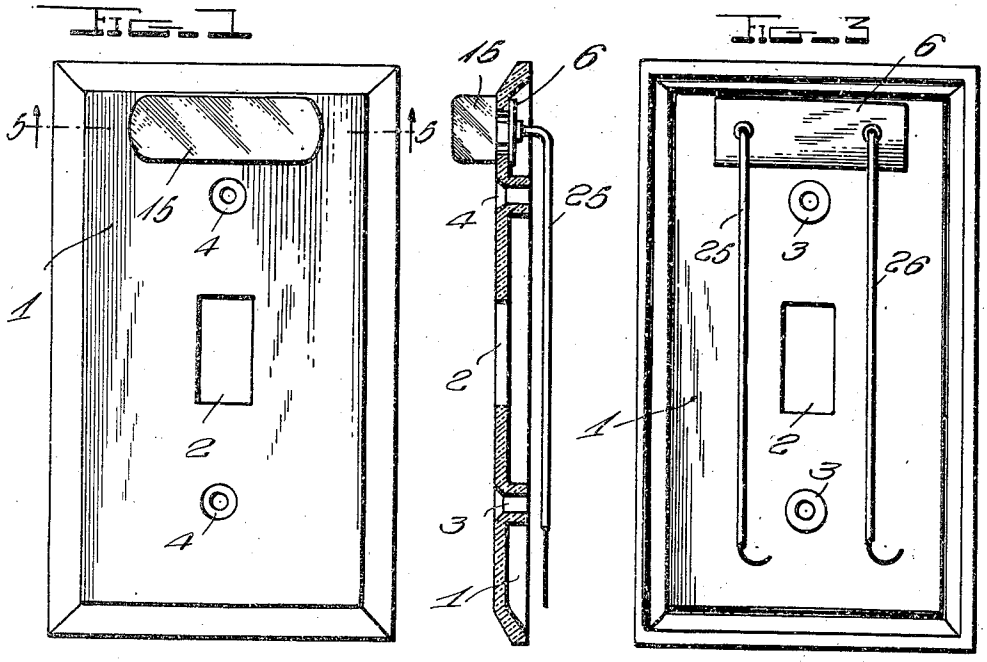
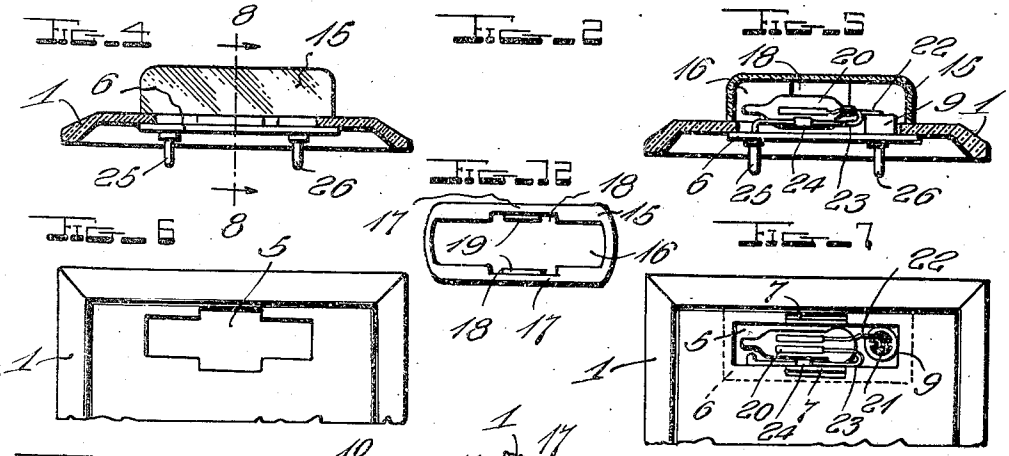
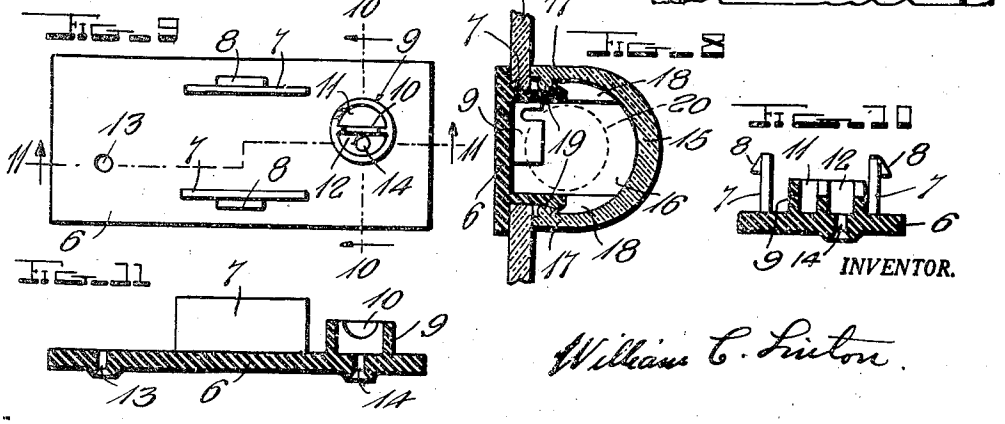
May 6, 1947. W. C. LINTON 2,420,000

ILLUMINATOR FOR COVER PLATES

Filed Oct. 10, 1944







INVENTOR.

William C. Linton.

Patented May 6, 1947

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ILLUMINATOR FOR COVER PLATES

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Application October 10, 1944, Serial No. 558,055

1 Claim. (Cl. 240—2)

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The present invention relates to cover plates for electrical outlet boxes and more particularly to an illuminator for such plates whereby the latter may be more easily located in dark or secluded places, having among its objects to provide an illuminator which may be easily and readily applied to any conventional cover plate and one which may be connected to the cover plate without the use of separable fastening elements.

Another object of the present invention is to provide a cover plate and illuminator therefor which will be highly attractive and decorative when installed and comparatively inexpensive in the cost of manufacture, thereby rendering the same commercially desirable.

Other objects of the invention will be in part obvious and in part pointed out hereinafter.

In order that the invention and its mode of operation may be readily understood by persons skilled in the art, I have in the accompanying drawings and in the detailed following description based thereupon, set out an embodiment of the same.

In the drawings:

Fig. 1 is a front elevation of a cover plate having my improved illuminator attached thereto.

Fig. 2 is a vertical section through the cover plate showing the illuminator in side elevation.

Fig. 3 is a rear elevation of the cover plate.

Fig. 4 is a transverse section through the cover plate showing the illuminator in elevation.

Fig. 5 is a transverse section taken on the line 5—5 of Fig. 1 in the direction of the arrow points.

Fig. 6 is a detail front elevation of the cover plate with the illuminator removed.

Fig. 7 is another detail front elevation of the cover plate with the lamp supported therein but the lens or housing for the lamp being removed.

Fig. 8 is a slightly enlarged transverse section taken on the line 8—8 of Fig. 4 in the direction of the arrow points.

Fig. 9 is a plan view of the lamp supporting plate.

Fig. 10 is a transverse section of the lamp supporting plate taken on the line 10—10 of Fig. 9 in the direction of the arrow points.

Fig. 11 is a longitudinal section through the lamp plate taken on the line 11—11 of Fig. 9 in the direction of the arrow points, and

Fig. 12 is a bottom plan view of the lens or lamp housing.

Referring now more particularly to the accompanying drawings wherein like and corresponding parts are designated by similar reference

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characters throughout the several views, I have illustrated a conventional cover plate for receiving a single throw switch of the toggle type which is preferably molded from translucent materials and may be of any color or design as would keep the same in harmony with the decorations upon the wall or other support to which the cover plate is applied. This cover plate is preferably rectangular in configuration, as shown, having a central wall 1 in which is formed a rectangular opening 2 and the latter receives the knob or lever of the toggle switch contained within the cutout box. Formed with the rear face of the body portion of the plate are a pair of projections 3 through which extend openings 4 for the reception of the attaching screws (not shown), whereby the plate may be connected in the usual manner to the cutout switch or box therefor. I employ a cover plate of the above type and cut or have formed therein adjacent its upper end, a substantially cross-shaped opening 5 through which extends and is supported therein an illuminator embodying the present invention.

This illuminator comprises a back or lamp supporting plate 6 preferably molded from insulated material and of a rectangular configuration, as shown, whereby it may be placed closely adjacent the rear wall of the cover plate 1 in the manner as better illustrated in Figs. 2 and 3 of the drawings. Formed with and projecting from one face of this plate 6 is a pair of parallel walls 7 each having a knob or projection 8 formed therewith and arranged adjacent their outer ends, and each projection having an outer inclined surface, as shown. Also formed with one face of this plate and projecting at right angles therefrom is a cup-shaped member 9 preferably of a cylindrical configuration and having its outer end open. A partition 10 is formed with the cup or receptacle 9, dividing the same into two separate compartments 11 and 12. Also formed with and extending through the plate 6 are the openings 13 and 14, the latter opening 14 registering with the compartment 12 formed within the receptacle 9.

The lamp housing or lens is also preferably molded from translucent materials and may be in various colors or a color that will match or harmonize with the cover plate 1. This lens 15 is preferably of rectangular configuration as shown, with its lower or bottom face open, which communicates with the compartment 16 formed therein. The inner face of each side wall 17 of the lens is provided with a vertically extending recess 18 into which may extend the walls 7 of the plate 6 and these side walls 17 of the lens

have each a rounded knob projection 19 capable of riding over the inclined outer face of the projections 8 of the walls 7, whereby, upon applying pressure to the lens 15, these projections 19 may be forced over the projections 8 and thereby form a snap connection between the plate 6 and the lens 15. In attaching my illuminator to a cover plate, the lamp supporting plate 6 rests against the rear wall of the cover plate until the walls 7 project through the enlarged portions of the opening 5 formed within the cover plate and when the lens 15 is connected to the walls or projections 7 of the plate 6 in the manner as best illustrated in Fig. 3 of the drawings, the lamp plate and lens will be securely locked in place upon the cover plate. By the projections or walls 7 fitting within the enlarged portions of the opening 5, the lamp plate 6 will be prevented from lateral movement and as the outer ends of these projections 7 fit within recesses 18 formed within the inner walls of the lens 15, the latter will be prevented from sliding movement upon the cover plate.

The type of lamp preferably used is a miniature neon lamp 20 having a leak resistor 21 connected in series therewith. These lamps are known to consume only an infinitesimal amount of current and have a relatively long life, thereby making the same especially desirable for the purpose of illuminating cover plates. By molding the lens 15 and the cover plate 1 from translucent molding materials and employing a neon lamp of the aforesaid character, a faint glow of light is diffused over the outer face of the plate 1, whereby, one can readily locate the plate in dark or secluded places and yet at other times, the glow of light renders the cover plate very attractive, especially where the cover plate and lens are in colors or a combination of colors.

The leak resistor 21 is preferably prepared from a molded composition which is placed within the cup 9 and the partition 10 arranged within the cup having a recess in the outer face thereof, permits this molded composition to extend within both of the compartments 11 and 12. One lead wire 22 from the lamp is connected to the leak resistor and extends within the compartment 11 of the cup 9, whereas, the other lead wire 23 of the lamp is connected as at 24 to one end of a wire 25. Another wire or connector 26 has one end extending through the opening 14 of the plate 6 and terminates within the compartment 12 of the receptacle 9. The connector or wire 25 extends through the opening 13 of the plate 6. The opposite ends of the wires or conductors 25 and 26 are connected to the terminals of the switch or other electrical device which is arranged within the cutout box to which the cover plate is applied, whereby, the wires 25 and 26, lamp 20 and resistor 21 will be arranged in series with the terminals of the switch but in parallel thereto, whereby, when the switch is opened, the current may be directed to the lamp 20 for causing the same to glow but when the switch is closed, the current will pass therethrough and the light will be extinguished.

Manifestly, the construction herein shown is capable of considerable modification and such modifications as come within the scope of my claim, I consider within the spirit of my invention.

I claim:

A combined escutcheon for electrical outlets and lamp housing assembly therefor molded from plastic insulating materials comprising a cover plate having inner and outer parallel walls and a rectangular shaped opening extending therethrough, said cover plate having recesses therein arranged at the opposite sides of the rectangular shaped opening therein, a lamp supporting plate seatable directly upon the inner wall of said cover plate and extending completely over the rectangular shaped opening therein, a pair of yieldable walls each having one end formed with said lamp supporting plate, said yieldable walls extending through the recesses within said cover plate to prevent rectilinear sliding or turning movement of said lamp supporting plate with respect to said cover plate, knobs formed with the outer extremities of said yieldable walls and spaced from the outer wall of said cover plate, a translucent lamp housing extending completely over the rectangular shaped opening within said cover plate, side and end walls formed with said lamp housing and seatable directly upon said cover plate, said side walls of the lamp housing having recesses therein for receiving the outer extremities of said yieldable walls of the lamp supporting plate so as to prevent rectilineal sliding or turning movement of said lamp housing with respect to said cover plate, knob projections formed with said lamp housing and having a snap-on connection with the knobs of said yieldable walls whereby said lamp supporting plate and the side and end walls of said lamp housing will be caused to engage said cover plate and be retained thereupon.

WILLIAM C. LINTON.

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