

Oct. 7, 1941.

G. M. CRESSATY

2,258,541

ILLUMINATED VANITY CASE

Filed June 14, 1938

2 Sheets-Sheet 1

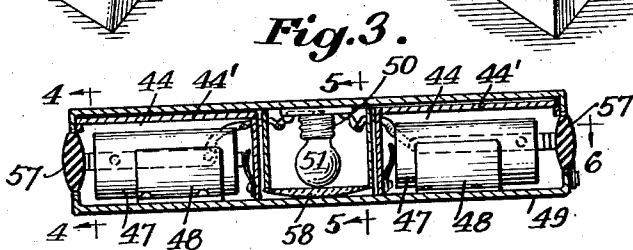
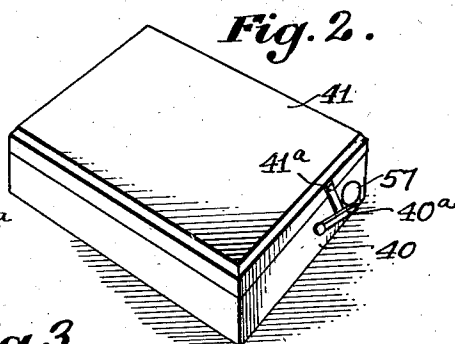
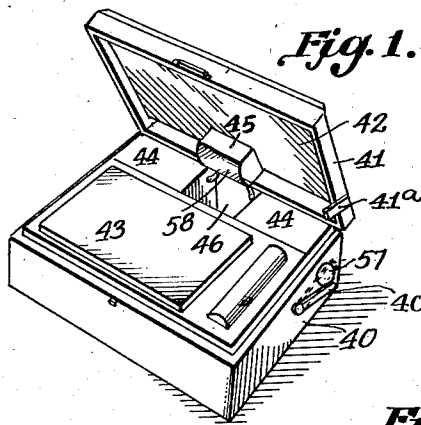


Fig. 4.

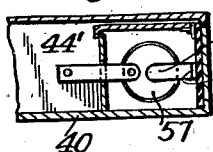


Fig. 5.

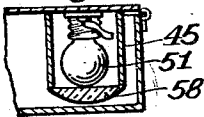


Fig. 6.

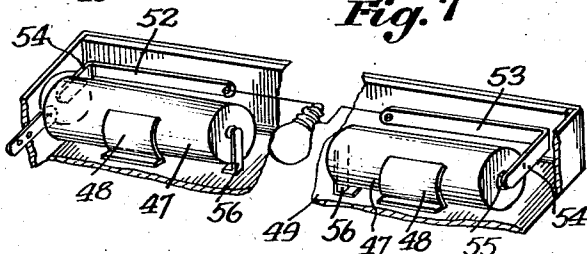
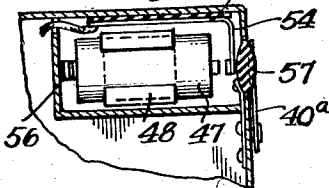
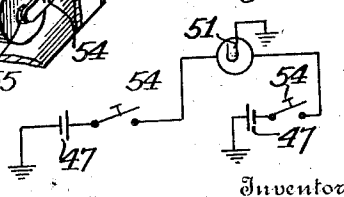


Fig. 8.



Inventor

Fig. 10.

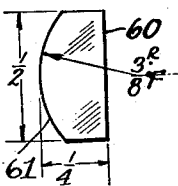
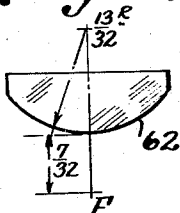


Fig. 11.



GEORGE M. CRESSATY.

by David W. Gould

Attorney

Oct. 7, 1941.

G. M. CRESSATY
ILLUMINATED VANITY CASE
Filed June 14, 1938

2,258,541

2 Sheets-Sheet 2

Fig. 12.

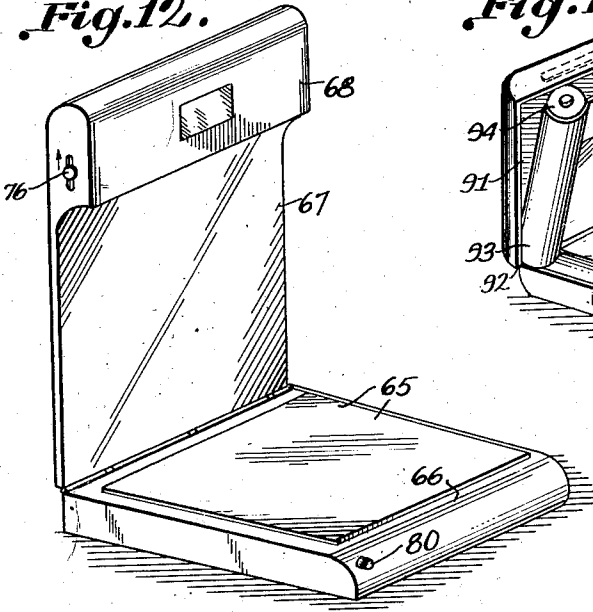


Fig. 15.

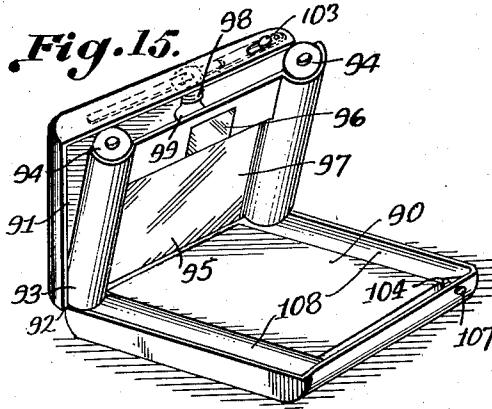


Fig. 18.

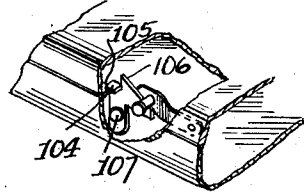


Fig. 13.

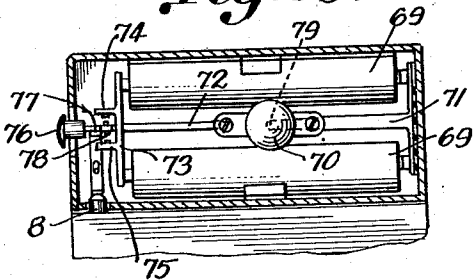


Fig. 16.

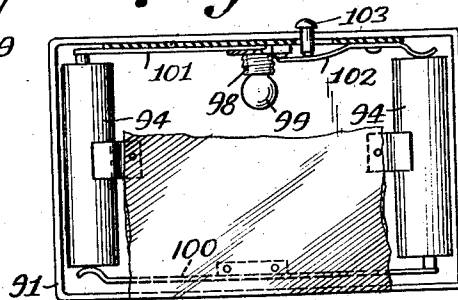


Fig. 14.

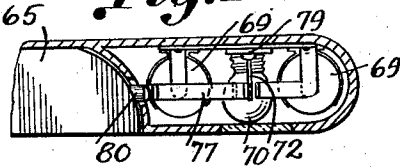


Fig. 17.



INVENTOR.
GEORGE M. CRESSATY.

BY *David W. Gould*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,258,541

ILLUMINATED VANITY CASE

George M. Cressaty, New York, N. Y.

Application June 14, 1938, Serial No. 213,672

13 Claims. (Cl. 240—6.45)

This invention relates to vanity cases, and is concerned particularly with compacts carrying their own lighting source, with a combination of a lens so constructed as to afford a maximum of efficiency for proper make-up at all times and under all conditions.

In connection with the lighting of the various forms of compacts hereinafter described, it is understood that, owing to the comparatively small size of a compact or like article, it is necessary to use standard miniature batteries and bulb, the same being conveniently renewed. In the use of miniature batteries and bulb, it is well known that the beam from said bulb is widely spread and of low intensity. This renders the use of such a bulb for the sole lighting effect of little value.

In the contemplated use, it is highly important that the intensity of light be increased and that the beam from the source be concentrated into a form and at a focus which will be distributed over the face of the user of the vanity case, for the purpose of simultaneously illuminating all of the face area with a light of desired intensity. This object cannot be accomplished by the miniature bulb alone or by the well known bulb-lens in which a rounded pin lens is formed as an integral part of said bulb.

The main object of the invention is the provision in a compact or like carrier of a source and lens controlling light, having a relatively fixed relation to the mirror element of the compact and moving with the mirror in the necessary operations thereof to reflect the whole face, or a portion thereof, to insure a light direction and spread which will follow the movements of the mirror in the various inclinations thereof, whereby the path of illumination is maintained constant with respect to the plane of the mirror to insure the most complete and effective illumination at any operative inclination.

A further object of the invention is the provision of independent sources of energy for the light source, with means whereby either or both such sources of energy may be selectively utilized to vary the intensity of the light at will, together with independent means for automatically de-energizing said light source.

A further object of the invention is the provision of a vanity case with a mirror, batteries, and light source, with controlling means for the battery current arranged on the case so that when the case is held in one hand for use in the usual manner, the controlling means is convenient to the fingers of that hand in natural

movement, whereby the entire lighting function is carried out by the hand supporting the case in a convenient, easy, and simple manner without in any way disturbing or changing the grip of the hand on the case.

A further object of the invention is the provision of a compact arrangement in which the entire lighting unit is fixed to the upper edge of the mirror, leaving the body of the case wholly free for the reception of powder or other cosmetic products, and which at the same time projects at will a beam for flashlight use, without unduly enlarging the size of the case, and with means which insures automatic extinguishing of the light.

Other objects of the invention will appear from the complete specification and claims, and from the accompanying drawings, in which:

Figure 1 is a perspective view showing the preferred form of illuminating means with the top or lid of the compact partly open;

Figure 2 is a similar view with the lid of the compact closed;

Figure 3 is a longitudinal section, partly in elevation, through the illuminating unit, the light source and lens proper being shown in the position occupied when the lid of the compact is closed;

Figure 4 is a section on the line 4—4 of Figure 3;

Figure 5 is a section on the line 5—5 of Figure 3;

Figure 6 is a section on the line 6—6 of Figure 3, a portion of the compact proper being shown;

Figure 7 is a perspective view of the lighting unit;

Figure 8 is a diagrammatic view of the circuit;

Figure 9 is a face view of the lens preferably used with the construction shown in Figures 1 to 8 inclusive;

Figure 10 is a side view of the same;

Figure 11 is a plan view of the same;

Figure 12 is a perspective view of another form of vanity case with the invention applied, the cover being shown open;

Figure 13 is a longitudinal sectional view through the lighting unit;

Figure 14 is a fragmentary sectional view through the end of the body of the case and the lighting unit, the latter being in the position occupied when the cover is closed and the light automatically extinguished;

Figure 15 is a perspective view of another form

of vanity case with improved lighting unit, certain parts being shown separated for the application or removal of the batteries;

Figure 16 is a vertical sectional view of the case, with the cover raised and the battery holding element in battery holding relation to the cover;

Figure 17 is a sectional view through the case body, cover and battery holders being shown in positions occupied when the cover is closed; and

Figure 18 is a perspective view of the cover trip and switch tripping element, shown in position to hold the cover closed.

In the form of the invention shown in Figures 1 to 11, inclusive, the light source proper has a fixed angular relation to the mirror 42, so that the beam controlled by the lens follows the inclination of the mirror. Therefore, no matter at what inclination the mirror may be arranged to afford the user the desired inspection of her face, the light beam, maintaining a constant invariable path of projection relative to the plane of the mirror, will properly light or illuminate the face in an identical manner under any and all mirror inclinations.

In this form, there is arranged in the body of the compact, in rear of the cosmetic receiving space 43, identical housings 44, the remote ends of which are in line with the side walls of the body of the compact, and the adjacent ends of which are spaced apart, as more particularly shown in Figure 1.

Fixed upon the mirror, preferably but not necessarily adjacent the lower edge and centrally of the length of the mirror, is a case 45 having such dimensions as to fit somewhat loosely in the space 46 between the adjacent ends of the housings 44. The case 45 is fixed to the mirror and will, of course, follow all mirror movements, maintaining a constant relation to the mirror, and when the compact cover 41 is closed, the case 45 fits between the housings 44, as shown more particularly in Figure 3.

Arranged in each housing 44 is a battery or like source of energy 47, the batteries being removable through cover 44' and supported in fixed position by clips 48 connected to the bottom of the housings which, as illustrated, is the bottom of the body of the compact.

Secured in the case 45 is a socket 50 to receive a miniature incandescent lamp 51. The center point contact of the socket is grounded to the wall of the top and thus to the body of the compact. The shell portion of the socket is connected by conductors 52 to bars 53 which extend lengthwise the respective housings 44 and appropriately insulated therefrom, with their relatively outer ends bent laterally at 54 and overlying the center contacts of the batteries, the remaining conducting portions of which are grounded at 56 to the bottom of the housings 44.

The remote end walls of the housings 44, which are, in effect, the side walls of the body of the compact, are formed with openings to receive push-buttons 57 which overlie the laterally deflected ends 54 of the switch bars 53 and may be operated at will to compel contact between the switch bars and the appropriate terminals of the batteries. The conductors 53 are of a length to permit full necessary and relative movement of the case 45 in following the movements of the mirror without disconnecting the electrical circuit, and it is obvious that the compact may be used in the usual way without the light source, and that, when such illumination is desired, either one of the push-buttons 57

may be operated to close the circuit through the associated battery and light bulb 51. Of course, it is apparent that the intensity of the illumination may be provided for through the simultaneous use of both push-buttons, supplying increased energy to the light filament. Thus, the user may energize the light source at will and when needed, and may also increase the normal intensity of the light when such additional illumination is necessary.

The face of the case 45 is closed by a lens 58, and the character of this lens is a very important essential feature of the invention. There is a definite limit to its diameter, it must give a proper intensity on a given short focus, and it must concentrate all available light into a given beam spread, preferably a beam of oval shape which will fully illuminate and concentrate on the face of the person using the compact. If the light beam were constructed to illuminate only a portion of the face, or widely spreading and uncontrolled, its intensity would be insufficient, with a consequent ineffective result, thus explaining the unsuccessful and unsatisfactory attempts heretofore of marketing illuminated compacts using miniature batteries and bulbs, as heretofore described.

In order, therefore, to render the illuminating means employing miniature batteries and bulbs of a maximum intensity with appropriately shaped beam, it is necessary to provide special type lens designs.

One type of such lenses used in either of the three forms of the invention is illustrated in Figures 9 to 11. Here the lens comprises an appropriate transparent body 59, plain or straight, on the inner surface 60 and with the outer surface curved in two right angled directions. The curved surface in the vertical direction of the lens is indicated at 61, and is formed on a radius of a determinate length with a center on the axial line of the lens. The curved surface in the horizontal direction is indicated at 62, and is formed on a radius less than the radius of the curved face 61 with the center on the same axial line.

This composite curved face produces asymmetrical oval beam distribution of desired intensity and with a spread which, at the distance the compact is usually held by the user, will provide an effective lighting area for her entire face.

It may be advisable and advantageous, in some instances, to insure that the lighting unit be automatically deenergized. To secure this result, it is preferred that the side walls of the body, either one or both, be provided with swinging mounted fingers 40^a, which may be manually moved to engage with the push-buttons 57 and hold said buttons in contact or circuit-closing position. Thus, through operation of said fingers, the user may, without further attention on her part, hold the lighting unit energized during use of the compact. It is important, however, that the lighting unit be deenergized when the cover 41' is closed. To provide for this result, said cover is provided with a lug 41^a which, in closing movement, will engage the finger or fingers and move the same from holding relation on the push-buttons, thereby permitting such buttons to move to inoperative position to break the circuit and deenergize said lighting unit. The user is thus assured that the light source is automatically deenergized in closing the parts, and

this relieves her of the necessity of cutting off the light and prevents unnecessary depletion of the batteries when said light is not in use.

Figures 12 to 15 show another form of the vanity case with the invention applied. In this form the body 65 of the case is of usual hollow form, except that the forward wall is upwardly and inwardly rounded, as at 66. The lid or cover 67 is of a length and breadth to close the body, and in this length is provided with the usual or any preferred type of mirror. For example, the cover may be made of metal, and within the desired mirror area brought to a high polish for reflective purposes.

The cover is extended beyond the body-covering length and provided, preferably on its inner side, through the extended area with the improved lighting unit. This unit includes a casing, preferably of rectangular form, as at 68, of which the extended cover forms one wall. Within the casing in spaced parallel relation are arranged batteries 69, between which is secured a lamp socket 70, one contact of which is connected to the wall of the case. The battery terminals at one end are connected to the case by conductor strip 71, while the other battery terminals lead through a conductor strip 72 to a U-shaped switch member 73, arranged adjacent the end wall of the unit, and each having spaced contact elements 74 and 75. A manually operable switch button 76 extends through a slot in the end wall of the unit and is connected within the unit to a transverse U-shaped yoke 77, the ends of which are movable between the arms of the adjacent switch members 73, the ends of the yoke having contacts 78, which in the elevated position of the yoke, through appropriate movement of the switch button 76, will engage the upper contacts 74 of the switch members, and in the downward movement of the switch button will engage the lower contacts 75 of such switch members. In either position of the yoke the circuit to the bulb, arranged in the socket 70, and indicated at 79, will be closed.

The lighting unit of this form is designed to present two distinctive and highly important features in connection with vanity case lighting. The first of these is that the light under some circumstances is automatically extinguished by the closing of the cover, and under other circumstances remains energized. Either condition may be selected by the user.

To insure that the light under the selected circumstances will be automatically extinguished when the cover is closed, it will be seen that the forward wall of the body is rounded as described, and that the lower wall of the lighting unit casing is of complementary form. Thus, when the cover is closed, the wall of the cover will slide over and fit the forward wall of the case. The lighting unit in this position is arranged beyond the body but is in the same plane as the cover.

Extending through the forward wall of the cover is a rounded pin 80, acting inwardly of the body. This pin 80 is arranged in the plane of the yoke 77 so that, as the cover moves to closed position, the pin 80 will engage and move the yoke 77 to a position free of the contacts 74 and 75 and thus breaking the circuit. This, of course, only follows when the yoke has been moved downwardly by the button 76 to engage the contacts 75 of the switch members 73, for if the button has been moved upwardly in the relation of the parts as shown by arrow 81 in Figure 12, the yoke contacts 78 will engage the upper contacts

74 of the switch members 73, and in this position the yoke is out of contact with the pin 80, and will not be operated in the closing of the cover.

Thus, it will be seen that the user by selective operation of the button 76 may insure extinguishing of the light when the cover is closed and in an entirely automatic manner. If, however, the light is desired after the cover is closed, or is desired before the cover is raised, correct operation of the button 76 will provide the results.

The wall of the casing of the lighting unit in line with the bulb 79 is cut away to receive a lens 82 particularly designed to increase the light intensity and concentrate the light on the face of the user to insure effective and complete illumination at all times when the electric lighting is used.

It is to be particularly noted that this form, as in the form first described, provides a light source which has a fixed relation to and moves at all times with the mirror, and in which the light and lens is preferably set to direct the light at an angle to the mirror surface. In this form, it is also to be noted that the batteries move with the mirror and that incident to the parallel relation of the batteries ample battery space is provided with free access from the rear wall without increasing the length of the unit beyond that of the vanity case body. The entire lighting unit is fixed to the upper edge of the cover, obstructing no portion of the mirror and leaving the case body wholly free for the reception of any cosmetic products.

In the form illustrated in Figures 15 to 18, the vanity case comprises a hollow body 90 and a hollow cover 91, the depth of the cover being somewhat less than that of the body. The cover is hinged to the body at 92, and also hinged at this point is a battery carrier and retainer 93. The carrier 93 is made up of spaced semicircular metallic elements of a size to receive batteries 94 and spaced apart to snugly fit between and be held by frictional contact with the side walls of the hollow cover.

The elements of the carrier are formed as a unit and connected at their ends, as in the position indicated in Figure 16, by a plate 95, centrally of which is formed a lens receiving aperture 96. Carried by and preferably connected to the battery receiving elements below the plate 95 is a mirror section 97, of appropriate material.

Secured to the inner side of the top wall of the cover, as in Figure 16, is a lamp socket 98, designed to receive a miniature lamp 99. Similar terminals of the batteries are connected by a bridging strip 100, while the opposite terminal of one battery is connected to one terminal of the lamp socket 98, as by connecting strip 101. A spring strip 102 leads from the similar terminal of the other battery to a position to engage with the other terminal of the lamp socket. A manually operable button 103 is slidably mounted in the wall of the cover and bears against the spring strip 102, permitting the strip to be moved into contact with the socket when the button is moved in one direction and forcing the strip from contact when the button is moved in the opposite direction, all as more particularly shown in Figure 16. Thus the user by appropriately moving the button may energize or de-energize the light bulb.

In this form it is also of importance that the light be automatically extinguished when the cover is closed. For this purpose the usual spring catch 104 terminally formed to engage the angle

keeper 105 of the cover, as usual, is further formed with an angular upper edge 106, which as the cover is closed engages the stem of the button and forces the same to a position to move the end of the spring strip 102 out of contact with the lamp socket and so breaking the lamp circuit. The catch is operated for opening the cover through the usual button 107.

The battery carrier may be moved free of the cover proper to expose the inner portions of the elements for the application of the batteries, and when the battery carrier is moved back into the cover, the fixed connections are automatically established. The body of the vanity case may have rounded depressions 108 to receive the projecting portions of the battery carrier when the cover is closed.

The lens aperture 96 is designed to receive an appropriate lens through which the otherwise limited light of the miniature bulb is materially intensified, and the resultant beam is controlled in direction and spread to fully and completely illuminate the face of the user.

In this form, as in the previous forms, the light source, when the vanity case is in use, moves with and is constantly fixed in relation to the mirror. The light rays are preferably directed at that angle to the mirror surface which will best permit desired illumination of the face of the user while avoiding direct glare. The battery carrier, when swung to inoperative position, permits free access to the lamp socket for lamp or battery renewal and to the electrical connections for correction or repair.

While a detailed portrayal has been given of some of the forms the invention may take in the optical as well as in its mechanical characteristics, it is not intended to limit the invention to the above description. The nature of the invention is such that it may be applied in connection with a multitude of different uses. The invention may be used in connection with a multitude of compacts, vanity cases, cigarette cases, hand bags, lipstick or any other cosmetic carriers of different shapes or sizes. Optical closures may be used or made of glass or of any other transparent material, with changes in angles or curvatures of said optical closures. Rearrangement of the batteries, replacement of same by any self-generating type, or other mechanical alterations may be made without departing from the spirit of the invention and the scope of the appended claims.

What is claimed to be new is:

1. In a vanity case including a body, a cover, a mirror in the cover, batteries, a light source, the light source being movable with and in constant fixed relation to the mirror, circuit closing means movable to either of two positions for closing the circuit from the batteries to the light source, and means for automatically breaking the circuit in the closing movement of the cover when the circuit closing means is in one of said two positions.

2. A vanity case including a body, a cover, a mirror in the cover, batteries, a light source, the light source being movable with and in constant fixed relation to the mirror, adjacent circuit terminals each including spaced contacts, a manually operable member movable to engage either of the pairs of contacts of the circuit terminals, and means for automatically moving the said member, in the closing movement of the cover, to free the contacts of the circuit terminals when the member is engaging one set of contacts, the

member being free of automatic control when engaged with the other set of contacts.

3. A vanity case including a body having a cosmetic-carrying function, a cover hinged to the body and movable for exposing the body, a mirror on the cover, and a lighting unit including horizontally disposed batteries having a light source mounted therebetween secured to the cover beyond the mirror, the cover when in closed relation to the body positioning the lighting unit wholly beyond and immediately adjacent the proximate end of the body.

4. A construction as defined in claim 3 wherein in the depth of the body and outward projection of the lighting unit are substantially equal, whereby to present a unit of uniform dimensions throughout when the cover is closed.

5. In a vanity case having a lighting unit and a cover hingedly connected to a cosmetic holding body portion, the cover carrying a mirror and a light source movable together in the hinging movement of the cover, an electrical circuit for the lighting unit, and dual means for closing the circuit, one of which causes the circuit to be broken automatically when the vanity case is closed, the other causing the manual closing of the circuit regardless of the position of the cover with respect to the body portion.

6. In a vanity case, a cover hingedly connected to a cosmetic carrying body portion and carrying a mirror, a light source and a lens movable together in the hinging movement of the cover, an electrical circuit including said light source and a source of electrical energy, and dual means for closing the circuit, one of which causes the circuit to be broken automatically when the vanity case is closed, the other causing the manual closing of the circuit regardless of the position of the cover with respect to the body portion.

7. A vanity case including a cosmetic carrying body portion, a cover, a mirror movable with said cover, a light source movable with the mirror, energizing means for the light source including an electrical circuit, manually operable means for closing such circuit, and means for acting automatically in the closing movement of the cover to move the manually-operable means to permit the circuit to be opened.

8. In a vanity case, a cover hingedly connected to a cosmetic carrying body portion and carrying a mirror, a light source and a lens movable together in the hinging movement of the cover, an electrical circuit including said light source and means for varying the intensity of the light source at will, said means including dual sources of electrical energy, and dual means for closing the circuit, one of which latter means permits the circuit to be broken automatically when the vanity case is closed.

9. In a vanity case, a cover hingedly connected to a cosmetic carrying body portion and carrying a mirror and a light source, batteries, a battery carrier for receiving the batteries and set under the cover to retain the batteries, an electrical circuit for said light source and batteries, a manually operable button for controlling the circuit, and means on the body portion for automatically shifting the button to break the circuit as the cover is closed.

10. In a vanity case including body and cover portions, a lighting unit including an electrical circuit therefor, spaced semicircular battery receiving members hinged to the body portion adjacent the connection of the cover, a plate connecting said members, said members being mov-

able relative to the cover for receiving the batteries and interfitting with the cover when the batteries are in position, a mirror and light source fixed with respect to and movable with the cover, a manually operable button for controlling the circuit, and means on the body portion for automatically shifting the button to break the circuit as the cover is closed.

11. In a vanity case having body and cover portions, a lighting unit carried by the cover portion and including spaced battery retainers connected by a lens carrying plate and movable to a cover interfitting position, and a light source mounted in fixed relation with respect to the cover, the lens carrying portion of said plate being adjacent the light source when said battery retainers are in the cover interfitting position.

12. A vanity case including a body, a cover therefor, a mirror movable with the cover, a light source carried by the cover and having a constant fixed relation to the mirror, batteries for energizing the light source, a circuit including the

batteries and light source, a manually-operable button for controlling the circuit and opening and closing the circuit at will in any open position of the cover, and means whereby the button may be compelled to assume a definite circuit controlling position when the cover is closed, said button compelling means being effective only as the cover reaches final closing position and permitting the button to be free for manual control following the closing of the cover to completely govern the circuit at will.

13. In a vanity case, a cosmetic carrying body, a cover therefor, a light source in the cover, batteries for energizing the light source, and electrical circuit between the batteries and light source, a switch for controlling the circuit, and means for controlling the switch in a predetermined movement of the cover, said means being operatively responsive to cover-closing movement only and freeing the switch following such movement to permit manual control of the switch at will.

GEORGE M. CRESSATY.