

April 26, 1949.

J. S. WACHTEL

2,468,248

ILLUMINATED VANITY CASE

Filed Sept. 13, 1946

2 Sheets-Sheet 1

Fig. 1.

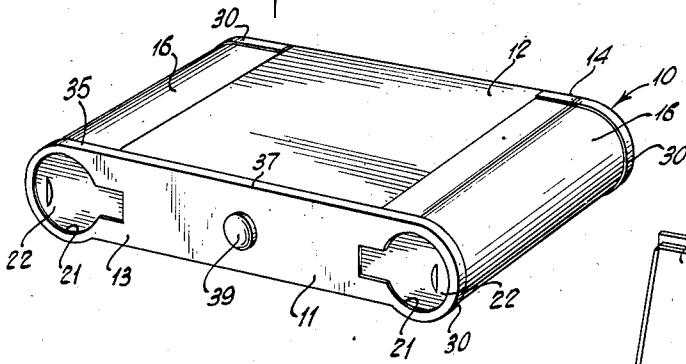


Fig. 2.

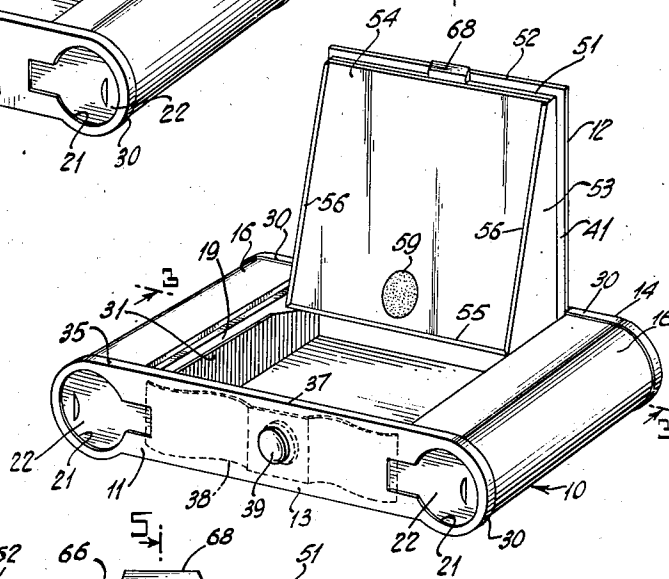


Fig. 4.

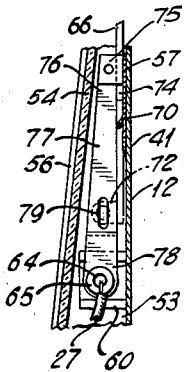
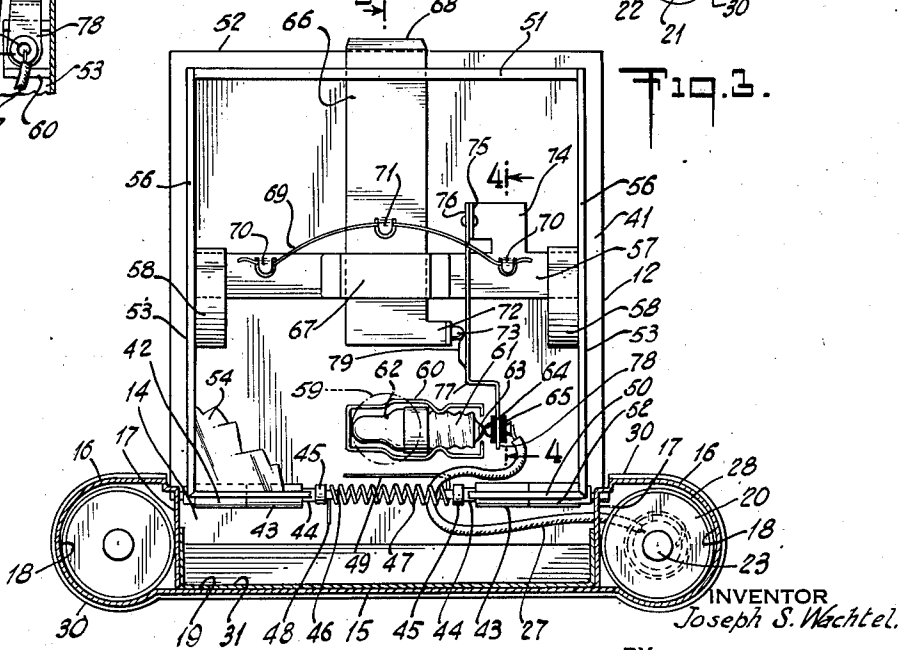


Fig. 3.



INVENTOR
Joseph S. Wachtel.

BY
Watson, Bristol, Johnson & Lavenworth
ATTORNEYS

April 26, 1949.

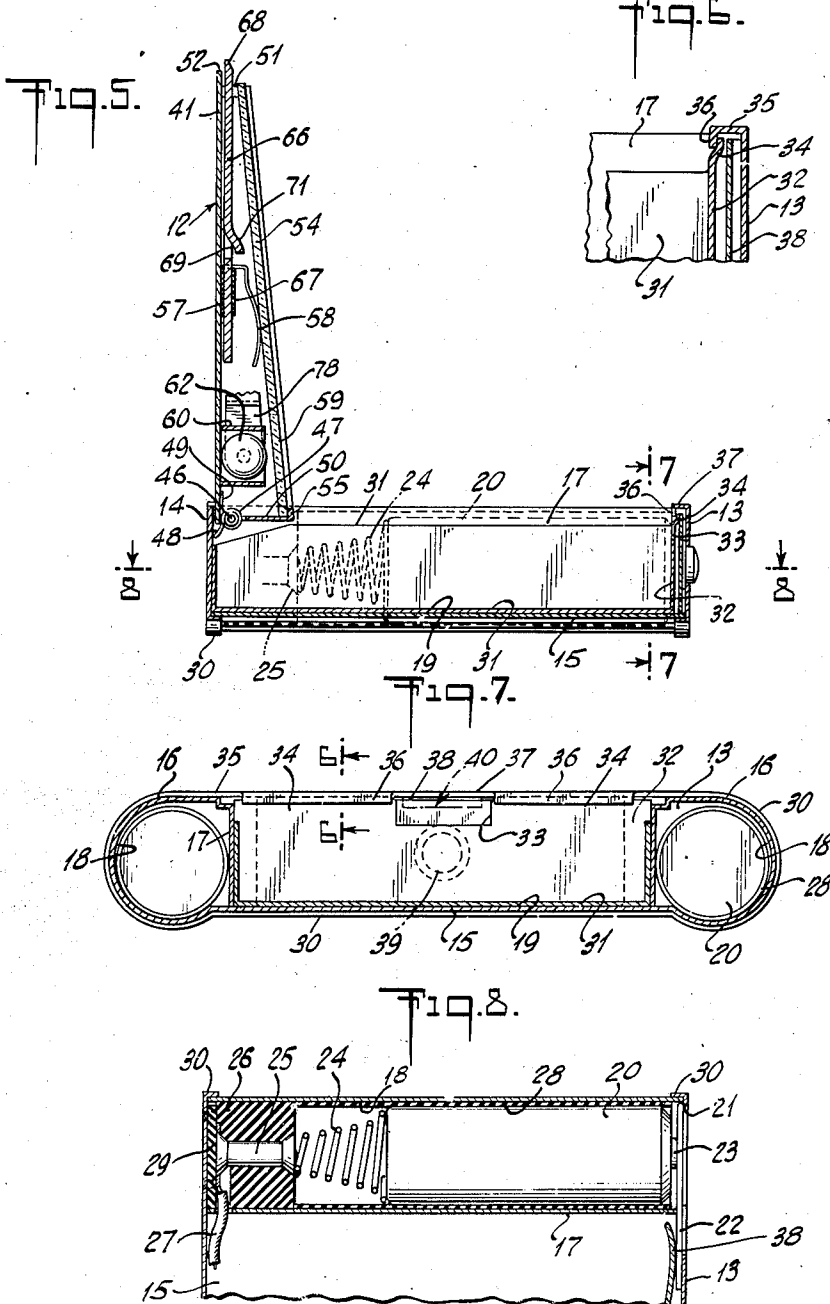
J. S. WACHTEL

2,468,248

ILLUMINATED VANITY CASE

Filed Sept. 13, 1946

2 Sheets-Sheet 2



INVENTOR

Joseph S. Wachtel.

BY

Watson, Bristol, Johnson & Leavenworth
ATTORNEYS

UNITED STATES PATENT OFFICE

2,468,248

ILLUMINATED VANITY CASE

Joseph S. Wachtel, New York, N. Y.

Application September 13, 1946, Serial No. 696,816

5 Claims. (Cl. 240—6.45)

1

The present invention relates to improvements in vanity cases, and the like, and, more particularly, to illuminated vanity cases wherein a battery energized electric lamp may be employed to emit light rays to illuminate features of a user for observance in a mirror carried in the case.

A general object of the present invention is to provide such an illuminated vanity case wherein the electrical circuit includes a switch mechanism effectively operable by latch mechanism for the vanity case lid in a manner so that when the lid is swung to open position the latch will be permitted to move to a position allowing the electrical circuit automatically to be closed to light the electric lamp effectively for illuminating purposes, such as lighting up the features of the user as she looks into the mirror, and when the lid is latched to closed position the electrical circuit will be broken efficiently, the structure also permitting efficient manual operation of the latch when the lid is open to put out the light should the user so desire when there is sufficient illumination from other sources.

A more specific object of the present invention is to provide in such an illuminated vanity case construction a hinged lid carrying a mirror on its inner side and spaced therefrom to provide an intervening compartment in which are mounted in a concealed manner behind the mirror a combined electrical circuit switching and latch mechanism of a nature to permit the latch to operate the switch mechanism to break an electrical lamp circuit when the lid is latch-closed or when the latch is manually retracted as may be desired when the lid is in open position, while permitting the electrical circuit to be automatically closed by the switch when the lid is swung to open position.

A further object of the present invention is to provide a structural embodiment of the device which is readily constructed in an economical manner permitting mass low-cost commercial production, and which allows efficient use and operation thereof.

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

The invention accordingly comprises the features of construction, combination of elements and arrangement of parts, which will be exemplified in the construction hereinafter set forth, and the scope of the invention will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken

2

in connection with the accompanying drawings, in which:

Fig. 1 is an elevational perspective showing an embodiment of the vanity case of the present invention lying flat on its bottom side, and with the lid thereof closed;

Fig. 2 is a view similar to Fig. 1 but with the lid of the case swung to open position;

Fig. 3 is an enlarged elevational section taken substantially on line 3—3 of Fig. 2, and with parts broken away;

Fig. 4 is a fragmentary sectional view of the lid structure taken substantially on line 4—4 of Fig. 3, and with parts broken away;

Fig. 5 is an elevational section of the case in open position as shown in Fig. 3 taken substantially on line 5—5 thereof;

Fig. 6 is an enlarged fragmentary sectional view, with parts broken away, taken substantially on line 6—6 of Fig. 7;

Fig. 7 is a transverse sectional view in elevation of the container portion of the case taken substantially on line 7—7 of Fig. 5; and

Fig. 8 is a sectional view, with parts broken away, taken substantially on line 8—8 of Fig. 5.

In the drawings like numerals identify similar parts throughout and it will be seen from Figs. 1 and 2 that the embodiment of the invention shown by way of example therein comprises a case 10 which includes a main container portion 11 and a lid portion 12. The container portion 11 of the case 10 is formed of two end plates 13 and 14 and a long strip 15 which provides the bottom. The strip 15 has its two ends turned upwardly and over at 16, and then downwardly at 17 to provide two end battery compartments 18, 18, and an intervening well 19. In one of these compartments, such as the one on the right, a battery or small pen light dry cell 20 is mounted to be included in an electrical circuit hereinafter described. The other battery compartment 18 may carry a spare dry cell, as shown.

Access to the two compartments 18, 18, may be had via holes 21, 21 in front end plate 13, each of which may be closed off by a sliding plate 22. As shown in Fig. 8, battery 20 may have its central electrode 23 grounded to the container 11 of the case 10 by contact with the closing plate 22 and for this purpose the parts of the container and the closing plate are preferably made of metallic material of good electrical conductivity, such as brass, silver or gold, or platings thereof. The battery 20 preferably is packed in compartment 18 by a biasing helical metallic spring 24, which is held under compression be-

tween the inner or back end of the battery 20 and a circuit terminal rivet 25 fixed in a block of insulating material 26 seated in the rear end of the compartment 18. An electrical conductor or wire 27, suitably insulated, leads from the contact rivet 25 and out of compartment 18, through a hole in the end flange 17 of strip 15 which provides a partitioning wall between compartment 18 and a central well in the container. Preferably the compartment 18 is provided with a lining sleeve of insulation 28 so as to prevent short circuiting. For purposes of simplification, this lining sleeve of insulating material, as shown only in Fig. 8, may extend to block 26 in compartment 18 to prevent the casing electrode of battery 20 and the biasing spring 24, which electrically connects that casing electrode to the contact rivet 25, from touching the metallic walls of the compartment 18. A packing washer 29 in compartment 18 performs a similar function with respect to the rear end of contact rivet 25 and the bared end of the wire 27.

The end plates 13 and 14 are secured in any suitable manner to the elongated container body strip 15, such as by turned over flanges 30—30 which may be anchored to the edges of the strip 15 in any suitable manner, such as by soldering. The central well 19 of the container 11 between the partitioning walls 17, 17 is preferably provided with a tray 31 to receive a cosmetic material such as powder and, if desired, a puff applicator. The tray 31 has an extended front panel 32, as shown in Figs. 5, 6 and 7, which is medially notched at 33 to provide two upstanding flanges 34, 34. The top portion 35 of flange 30 on front plate 13 has two projecting portions 36, 36 turned down over tray flanges 34, 34 to hold the tray securely in position. Medially, the laterally projecting portion of top flange 35 above the notch 33, at 37, serves as a catch for a latch on the lid 12.

Between the front end plate 13 and the front panel 32 of tray 31 a space is provided in which is disposed a sinuously shaped leaf spring 38 carrying a central depressing button 39 projecting out through a hole in the end plate 13. As shown in Fig. 7, a portion of the leaf spring 38 is exposed in the notch 33 so that when inward pressure is applied to button 39 the projecting end of a latching or locking plate or bolt received beneath catch portion 37 of end plate flange 30, such as that indicated by dot-dash lines at 40 in Fig. 7, will be pushed or retracted inwardly to free it from beneath the catch portion.

As shown in Figs. 3 and 5, the lid 12 preferably comprises a metallic plate or panel 41 having a pair of hooks 42, 42, provided with the usual eyes, which are aligned with another pair of similar eyed hooks 43, 43 formed on the top edge of the rear end wall 14. Hinge pins 44, 44 are respectively received in the aligned hooks 42, 43 and 42, 43. Each hinge pin 44 carries a collar 45 and a projecting stud end 46 which is received in an end of a helical spring 47, with the latter bearing against the collar, so as to bias the pins 44, 44 away from each other and thus hold them in the hinge hooks. One end 48 of the helical or spiral spring 47 rests against the inner face of container end plate 14 and the other end 49 of the spring rests against the inner face of lid plate 41 so as to bias the lid to the open position such as that shown in Figs. 2, 3 and 5.

The lid plate or panel 41 has affixed thereto a relatively wide outstanding bottom flange 50 adjacent the hinge structure and a relatively nar-

row top flange 51 adjacent its free edge 52 which, together with a pair of triangularly shaped outstanding end flanges 53, 53, serve to define a compartment closed by a mirror 54. The edge 55 of bottom flange 50 and the edges 56, 56 of end flanges 53, 53 are all turned in over edges of mirror 54, cooperatively to hold it in position.

In the compartment defined by the lid plate 41, its flanges 50, 53 and 53, and mirror 54, is mounted a transversely extending bracket strip 57 fixed to the lid plate. The bracket strip 57 has portions on its ends bent upwardly and reversely to provide spring fingers 58, 58 which bear against the back silvered surface of the mirror 54, as shown in Fig. 5, to hold the mirror outwardly against the turned over flange edges 55 and 56, 56. The mirror has a translucent or transparent light ray-transmitting spot 59, which may be formed by removing the reflecting surfacing material therefrom and etching, if desired, and the location of such spot with respect to the lamp is indicated in dotted lines in Fig. 3. Immediately behind the light ray-transmitting spot 59 is mounted an electric lamp or bulb socket 60 which may be in the form of a metallic bracket 61 fixed to the lid panel 41. With all of the parts of the case, including the hinges, preferably formed of metallic material, the lamp socket or bracket 60 serves to ground thereto the sleeve 30 terminal 61 of the electric lamp or bulb 62. The other lamp terminal, in the usual form of a central terminal button 63, is contacted by a contact rivet 64 carried by a body 65 of insulating material and with the wire or electrical conductor 27, leading from the battery compartment 18, connected to the contact rivet 64. Thus the electrical circuit, which includes the lamp 62 and battery 20, has one side thereof completed by ground through the case including the container 11 and the lid 12, and the other side thereof completed through the battery biasing spring 24, contact rivet 25, wire 27 and contact rivet 64.

In the lid compartment is mounted a spring-biased slidable latch plate or lock bolt 66 which is mounted on bracket strip 57 for sliding movement by means of a strap 67. The latch plate 66 has an outer end 68 preferably tapered, as shown in Figs. 2, 3 and 5, and projecting through a slot in the top flange 51 on a lid panel 41. Latch plate 66 is biased to this outward projecting or circuit making position, with its camming tapered nose 68 extending beyond the free edge 52 of lid panel 41, by means of a biasing spring 69 anchored to the bracket strip 57 by struck out ears 70, 70 and in turn anchored to the latch plate by struck out ear 71. The latch plate 66 carries on its inner or lower end a projecting arm 72 having a camming nose 73 to serve as a circuit switching mechanism operator as explained herebelow.

Bracket strip 57 carries an arm 74 having an upright portion 75 to which is riveted a fixed end 76 of a spring contact arm 77. The free end 78 of spring contact arm 77 carries the body 65 of insulating material through which contact rivet 64 extends and by which it is carried. Normally when there is no interference with the contact spring arm 77 it holds contact rivet 64 in contact with the terminal button 63 of the lamp 62.

On the contact spring arm 77 is provided an elongated boss 79 in the path of the nose 73 of the camming arm 72 on latch plate 66. When the latch plate 66 is biased to its outward circuit making or closing position, as shown in Fig. 3, its camming nose 73 is behind or beyond the

5

boss 79 and this permits contact spring arm 77 to hold contact rivet 64 in engagement with terminal button 63 of lamp 62 to close the circuit and light the lamp. However, if latch plate 66 is retracted to an inward circuit breaking or open position, against the force of biasing spring 69, the camming nose 73 rides over the boss 79 flexing the contact arm 77 to the right, as viewed in Fig. 3, thereby moving contact rivet 64 away from lamp terminal button 63 to break the electrical circuit so that the lamp is not lighted.

In operation of the embodiment of the invention disclosed in the drawings, when the lid 12 is swung to the closed position, as shown in Fig. 1, the projecting nose 68 of the latch plate 66 catches beneath the catch portion 37 of the flange 35 on front end plate 13 to hold the lid in closed position. The tapered face of the nose 68 facilitates this latching. In such relative positioning of the parts the latch plate 66 is retracted to circuit open position and the lamp circuit is broken in the manner indicated above, with the camming nose 73 on the latch plate riding over the boss 79 on the contact spring arm 77 to swing the latter to the right thereby separating contact rivet 64 and lamp terminal button 63. Thus when the case is closed the lamp is not lighted.

When one wishes to use the vanity case for its normal cosmetic applying purposes, pressure on the latch button 39 causes the latch spring 38 to push the nose 68 of latch plate 66 further inwardly to free the latch nose from beneath the catch 37. The lid spring 47 will then swing the lid 12 to the open position as shown in Figs. 2, 3 and 5. This frees the latch plate from any retracting force so that its biasing spring 69 will move it out to the position shown in Fig. 3, with its camming nose 73 passing beyond the boss 79 on contact spring arm 77, permitting the latter to carry contact rivet 64 to the left into contact with lamp terminal button 63, thereby closing the electrical circuit and lighting the lamp. Rays of light will pass through the ray-transmitting area 59 to shine upon the face of the user as she looks into the mirror 54 thereby lighting her features to aid in the application of cosmetics.

It will thus be seen that the latch 66 automatically operates the switch mechanism in the electrical circuit of the lamp 62 so that when the lid 12 is permitted to be swung open the lamp will be lighted, and when the lid is swung to closed position its latch, when the latter snaps into engagement with the catch 37 on the container 11, will hold the electrical circuit open with the lamp unlighted. Further, with the lid swung open, and where there is sufficient outside illumination to light the features of the user, such as in daylight, electrical energy of the battery 20 may be conserved by depressing the nose 68 of the latch with a finger to hold the electrical circuit of the lamp open.

It will thus be seen that the objects set forth above, among others, are efficiently attained and, since certain changes may be made in the above construction and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the

6

invention which, as a matter of language, might be said to fall therebetween.

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

1. An illuminated vanity case comprising, in combination, a container having a battery compartment, a lid hinged to said container for closing it in one position and opening the case in another position and having a mirror on the inner side thereof, means adjacent a reflecting surface of said mirror providing for outward passage of light rays, an electric lamp socket mounted to the rear of said means, means to connect one battery terminal to one lamp terminal, means mounted on said lid having a movable portion carrying an electrical circuit terminal to make contact with the second lamp terminal, insulated conductor means extending between said circuit terminal and the battery compartment for connection to the other battery terminal, catch means on said container, a spring-biased movable latch carried by said lid for engagement of said catch means to hold said lid in container-closing position, means to guide movement of said latch between a circuit-open position and a circuit-closing position with the spring biasing thereof tending to move it to the latter position and with its engagement of said catch means moving it to and holding it in the other position, and means on said latch to operate said circuit terminal-carrying means between make and break positions with said circuit terminal in engagement with the second lamp terminal when said latch is in circuit-closing position and with said circuit terminal separated from said lamp terminal by movement of said latch to circuit-open position.

2. An illuminated vanity case comprising, in combination, a container having a battery compartment, a lid hinged to said container for closing it in one position and opening the case in another position and having a mirror on the inner side thereof, means adjacent a reflecting surface of said mirror providing for outward passage of light rays, an electric lamp socket mounted to the rear of said means, means to connect one battery terminal to one lamp terminal, means mounted on said lid having a movable portion carrying an electrical circuit terminal to make contact with the second lamp terminal, insulated conductor means extending between said circuit terminal and the battery compartment for connection to the other battery terminal, catch means on said container, a spring-biased retractable latch carried by said lid for engagement of said catch means to hold said lid in container-closing position, means to guide movement of said latch between a circuit-open position and a circuit-closing position with the spring biasing thereof tending to project it out to the latter position and with its engagement of said catch means retracting it to and holding it in the other position, and means on said latch to operate said circuit terminal-carrying means between make and break positions with said circuit terminal in engagement with the second lamp terminal when said latch is projected out to circuit-closing position and with said circuit terminal separated from said lamp terminal by retraction of said latch to circuit-open position, said latch being capable of manual retraction when said lid is in open position.

3. An illuminated vanity case comprising, in combination, a container having a battery compartment, a lid hinged to said container for clos-

7

ing it in one position and opening the case in another position and having a mirror on the inner side thereof, means adjacent a reflecting surface of said mirror providing for outward passage of light rays, an electric lamp socket mounted to the rear of said means, means to connect one battery terminal to one lamp terminal, means mounted on said lid having a movable portion carrying an electrical circuit terminal to make contact with the second lamp terminal, insulated conductor means extending between said circuit terminal and the battery compartment for connection to the other battery terminal, catch means on said container, guide means in said lid, a slidable latch plate supported by said guide means for outward movement so that an end portion thereof will extend beyond an edge of said lid in a projected position of said latch plate and for inward movement to a retracted position, spring means biasing said latch plate outwardly to its projected position, the end portion of said latch plate being adapted to engage said catch means when said lid is swung to a closed position with said latch plate retracted, spring means biasing said circuit terminal-carrying means to circuit-making position, and means on said latch plate to move said biased circuit terminal-carrying means to and hold it in circuit-breaking position when said latch plate is retracted, said latch plate when projected permitting said circuit terminal-carrying means to move to and remain in circuit-making position.

4. An illuminated vanity case comprising, in combination, a metallic container having a battery compartment in which one pole of a dry cell is to be grounded to the case, a metallic lid hinged to said container for closing it in one position and opening the case in another position, said lid having a mirror on the inner side thereof, means adjacent a reflecting surface of said mirror providing for outward passage of light rays, an electric lamp socket mounted on the inside of said lid to the rear of said means and grounding one lamp terminal to the case, a spring arm fixed to the inside of said lid and having a free portion carrying an electrical circuit terminal to make contact with the second lamp terminal when said spring arm is permitted to move to circuit-making position, insulated conductor means extending between said circuit terminal and the battery compartment, a catch on said container, guide means behind said mirror mounted on the inside of said lid, a slidable latch plate supported by said guide means for reciprocatory movement between a retracted position and a projected position with its end portion extending beyond an edge of said lid in the latter position, spring means mounted on the inside of said lid biasing said latch plate out-

8

wardly to its projected position, the extending end portion of said latch plate being adapted to engage said catch when said lid is swung to a closed position with said latch plate retracted, and cam means on said latch plate to engage a portion of said spring arm to move the latter to and hold it in circuit-breaking position when said latch plate is retracted, said cam means being movable out of engagement with said spring arm when said latch plate is projected to permit that spring arm to move to and remain in circuit-making position.

5. In an illuminated vanity case a combined latch and electrical circuit switching mechanism comprising, a hinged lid for the case, a mirror mounted on the inner side of said lid and spaced therefrom to provide an intervening compartment, a grounded electric lamp socket mounted in said compartment adjacent an area permitting emission of light rays outwardly to in front of said mirror, a bracket mounted on said lid in said compartment, a spring arm in said compartment having one end thereof fixed to said bracket and the other end thereof carrying an insulated circuit terminal normally in position to make contact with a terminal of an electric lamp when mounted in said socket, guide means in said compartment mounted on said lid, a latch plate mounted for reciprocatory movement in said guide means with an end thereof projectable through a slot in an edge of said lid to engage a catch on a container portion of said case to which said lid may be hinged, spring means in said compartment biasing said latch plate outwardly to a projected position with its end portion extending to catch-engaging position, and cam means on said latch plate in said compartment to engage a portion of said spring arm and move the latter to circuit-breaking position when said latch plate is retracted and to free said spring arm for movement to circuit-making position when said latch plate is projected by its spring means.

JOSEPH S. WACHTEL.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,742,958	Kaufman	Jan. 7, 1930
2,119,267	Coleman	May 31, 1938
2,258,540	Cressaty	Oct. 7, 1941

FOREIGN PATENTS

Number	Country	Date
423,009	Great Britain	Jan. 23, 1935
789,825	France	Aug. 26, 1935