Nov. 19, 1940. G. L. ERARD 2,221,760

CASE FOR COSMETICS, AND ESPECIALLY LIPSTICKS

Filed Aug. 30, 1938

Fig. 1

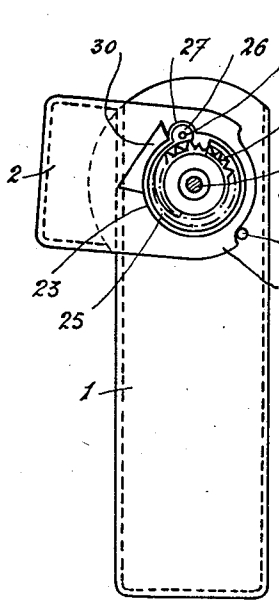


Fig. 2

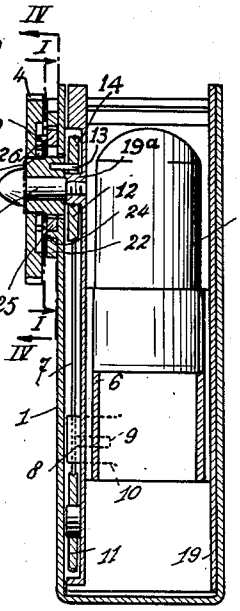


Fig. 3

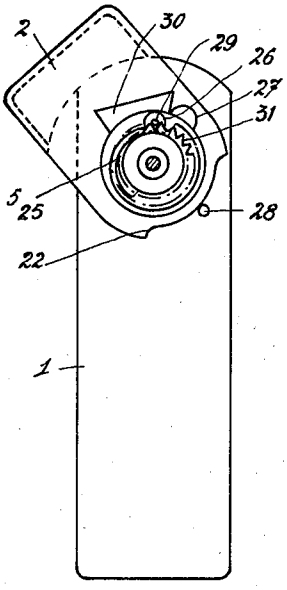


Fig. 4

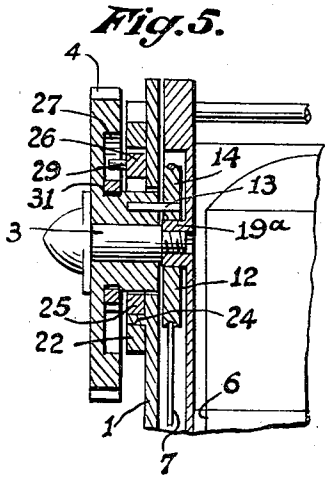
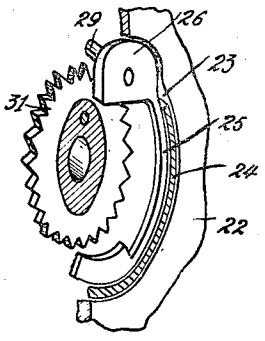


Fig. 5.



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Patented Nov. 19, 1940 2,221,760

UNITED STATES PATENT OFFICE

2,221,760

CASE FOR COSMETICS, AND ESPECIALLY LIPSTICKS

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Application August 30, 1938, Serial No. 227,566
In France May 23, 1938

7 Claims. (Cl. 206—56)

The present invention relates to cases for lipsticks which are to be held and operated with a single hand, so that the other hand remains free and can hold a handbag, a looking glass, and the like.

The invention is more especially concerned with cases of this kind constituted by a prismatic body on one side of which there is journalled an operating wheel the diameter of which is such that its periphery projects from the sides of the body. This operating wheel serves to actuate a lipstick slidable inside said body and capable of projecting therefrom when suitably moved to this effect through said operating wheel. A cover pivoted to said body serves to close it when said lipstick is retracted.

A slight drawback has been experienced with devices of this kind: If, for any reason, the operating wheel is operated while the cover is still in the closed position or even is in an intermediate position other than the fully opened position, the lipstick or other cosmetic may be crushed against said cover.

The essential feature of the present invention is to provide a case of the type described which eliminates this drawback.

According to an essential feature of the present invention, I provide, between the body of the case and the operating wheel, locking means controlled by said cover for preventing any rotation of said wheel with respect to said body as long as said cover is not fully opened.

According to a preferred embodiment of the present invention, the locking means in question is constituted by an elastic pawl carried by the lateral wall of the case body which carries the operating wheel and which is adapted to cooperate with a toothed wheel rigid with said operating wheel, in such manner that said pawl, which is normally engaged in the teeth of said toothed wheel, is disengaged therefrom, by entering a corresponding notch of the cover, only for a predetermined position of said cover corresponding to its full opening.

According to still another feature of the present invention, this elastic pawl is constituted by a spring arranged to brake the rotation of the cover with respect to the body and to lock it in a yieldable manner in the fully opened position.

Other features of the present invention will result from the following detailed description of some specific embodiments thereof.

Preferred embodiments of the present invention will be hereinafter described, with reference to the accompanying drawing, given merely by way of example, and in which:

Fig. 1 is an elevational view, on the side of the operating wheel, of the lipstick case according to the invention, the operating wheel being supposed to have been removed and the cover being in the fully opened position;

Fig. 2 is a vertical section of the lipstick case in the opened position, on the line 2—2 of Fig. 1;

Fig. 3 is an elevational view corresponding to Fig. 1, but with the lid partly closed.

Fig. 4 is a diagrammatic perspective view showing the elastic pawl and the corresponding toothed wheel as they would be visible if they were cut away from the body on the line 4—4 of Fig. 2.

Fig. 5 is a view on a larger scale of the upper left hand portion of Fig. 2.

As shown by the drawing, the lipstick case according to the invention, as illustrated by the embodiment shown by said drawing, includes a hollow prismatic body 1, for instance of square cross section, provided with a cover 2 adapted to pivot about a pin 3.

On this case, there is journalled an operating wheel 4, turning about pin 3 and the diameter of which is such that its notched periphery projects on at least one side from the body 1. Thus anyone holding the case can turn the operating wheel by means of the thumb of the same hand.

The cosmetic stick, which will be supposed to be a lipstick, 5, is carried by a lipstick holder 6 slidable inside a tubular sleeve 19 fitted in case 1.

At its upper part, this tubular sleeve 19 carries a boss 19a in which the end 21 of spindle 3 is screwed.

Two pulleys 11 and 12 are journalled on said sleeve, respectively at the bottom and top thereof. An endless cable 7, passing around these two pulleys so as to be driven by them, carries a piece 8 provided with a projection 9 engaging in a boss 10 integral with the lipstick holder 6.

Pulley 11 is free to rotate on its support 19. Pulley 12 is a driving pulley for cable 7. It is coaxial with operating wheel 4 and angularly coupled therewith through a lug 13 rigid with the operating wheel and engaging in a recess 14 provided in pulley 12.

Cover 2 carries a lateral extension 22, for instance integral therewith, provided with a circular hole or bore 23 adapted to fit on a flange 24 of case 1, said flange forming a bearing for 23. A curved spring 25 is housed in the recess inside flange 24, where it is fixed at one end. The opposed free end of said spring 25 carries a

lug 26. In the open position of cover 2, said lug 26 engages, through a gap provided in flange 24, into a notch 27 of the extension 22 of cover 2 (Fig. 1). For any other position of cover 2, the end 26 of spring 25 is pushed radially toward the axis of spindle 3 by the inner wall of the circular hole 23 formed in extension 22. Advantageously, as shown by the drawing, the portion of this inner wall which is to rub on head 26 is reinforced by a steel part 30 when pieces 2 and 22 are made of a soft metal such as copper or a precious metal (Fig. 3).

The end 26 of the circular spring 25 carries, on its outward side, a pin 29 parallel to spindle 3. The operating wheel 4 carries, on its inward side, a coaxial toothed wheel 31 rigid with said operating wheel, for instance welded thereon. The diameter, size of teeth, and position of said toothed wheel are such that pin 29 engages with the teeth thereof when spring 25 is deflected inwardly (position of Fig. 3) and that it releases said wheel 31 when it is allowed to expand outwardly (position of opening of the cover of Figs. 1 and 4, in which the head 26 of the spring is engaged in the corresponding notch formed in piece 22 of the cover).

This device operates in the following manner:

The case being held in one hand, it suffices to pivot the cover by moving it with the thumb so as to bring it into the open position shown by Fig. 1. Then, by turning wheel 4, also by means of the thumb, pulleys 11 and 12 are caused to rotate, and drive cable 7, the element 8 of which transmits an upward movement to the lipstick holder 6, so that the lipstick projects more or less from case 1.

Rotation of wheel 4 in the opposite direction causes the lipstick to slide back into case 1.

It will be readily understood that any rotation of wheel 4 is made impossible as long as the end 26 of spring 25 is not engaged in the corresponding notch 27 of 22 (that is to say as long as the cover is not fully opened) because for any other position of the cover spring 25 is deflected inwardly as a consequence of its end 26 bearing against the wall 23 of piece 22, so that its pin 29 engages into the teeth of wheel 31 and locks it in position.

On the contrary, as soon as the cover is fully opened, the end 26 of spring 25 snaps into notch 27 and pin 29, moved outwardly, releases wheel 31 so that the operating wheel 4 can be turned and the lipstick can be caused to project from case 1.

Therefore, as said lipstick can be driven out from its case only when its path has been wholly cleared by the full opening of cover 2, there is no possibility of said lipstick being crushed against the cover.

Furthermore, the engagement of lug 26 in notch constitutes a kind of yielding locking of cover 2 in the opened position. A sufficient thrust exerted on said cover overcomes this locking resistance so that the cover can be brought into the closed position. The fact that spring 25 is then deflected inwardly and exerts a reaction on wall 23 produces a braking effect which, in particular, serves to maintain cover 2 in the closed position thereof.

A lug 28 may be provided for limiting in both directions the rotation of cover 2.

Of course, the means for controlling the sliding movement of the lipstick inside case 1 under the action of wheel 4 are not in any way limited to those above described, which were given merely by way of example.

In a general manner, while I have, in the above description, disclosed what I deem to be practical and efficient embodiments of the present invention, it should be well understood that I do not wish to be limited thereto as there might be changes made in the arrangement, disposition, and form of the parts without departing from the principle of the present invention as comprehended within the scope of the accompanying claims.

What I clam is:

1. A device of the type described, which comprises, in combination, an elongated case, a cover movably carried by said case, a member slidable in said case, an operating wheel journalled on the outside of said case operatively connected with said member, for manually imparting a sliding displacement to said member through said operating wheel, and locking means controlled by said cover and adapted to lock said wheel against rotation except when said cover is fully opened, said locking means comprising a rotary member rigid with said wheel, a second member movable into and out of engagement with said rotary member and normally engaging said rotary member to prevent rotation of said wheel, and means controlled by said cover for disengaging said second member from said rotary member when said cover is fully opened.

2. A device of the type described, which comprises, in combination, an elongated case, a cover hinged to said case, a member slidable in said case, an operating wheel journalled on the outside of said case operatively connected with said member, for manually imparting a sliding displacement to said member in said case through said operating wheel, means for angularly locking said wheel with respect to said case, and spring means urging said locking means into inactive position adapted to be allowed to act by the full opening of said cover.

3. A device of the type described, which comprises, in combination, an elongated case, a cover pivotally mounted on said case, a member slidable in said case, an operating wheel journalled on the outside of said case operatively connected with said member, for manually imparting a sliding displacement to said member through said operating wheel, means for angularly locking said wheel with respect to said case, and spring means for urging said locking means into inactive position, said cover being adapted to normally oppose the action of said spring means and to leave them free to act only when fully opened.

4. A device of the type described, which comprises, in combination, an elongated case, a cover pivotally mounted on said case, a member slidable in said case, an operating wheel journalled on the outside of said case operatively connected with said member, for manually imparting a sliding displacement to said member through said operating wheel, a spring pawl for angularly locking said wheel with respect to said case, arranged to be out of engagement when left free to expand, and cam means carried by said cover for normally keeping said pawl engaged and allowing it to escape when said cover is fully opened.

5. A device of the type described, which comprises, in combination, an elongated case, a cover pivotally mounted on said case, a member slidable in said case, an operating wheel journalled

on the outside of said case operatively connected to said member, for manually imparting a sliding displacement to said member through said operating wheel, a spring carried by said case, a toothed wheel coaxial with said operating wheel and rigid therewith, a pin carried by said spring adapted to engage with the teeth of said toothed wheel for locking said operating wheel with respect to said case, the elasticity of said spring urging said pin away from said teeth, and a cam surface carried by said cover adapted to cooperate with said spring for normally keeping it in the position corresponding to engagement of said pin with said teeth and releasing said spring when said cover is fully opened.

6. A device of the type described, which comprises, in combination, an elongated case, a cover pivotally mounted on said case, a member slidable in said case, an operating wheel journalled on the outside of said case operatively connected to said member, so as to permit of manually imparting a sliding displacement to said member through said operating wheel, a toothed wheel coaxial with said operating wheel and rigid therewith, a curved spring carried by said case deformable in its plane parallel to that of said toothed wheel, a pin carried by said spring at right angles to said plane adapted to engage with the teeth of said toothed wheel for locking said operating wheel with respect to said case, the elasticity of said spring urging said pin away from said teeth, a rounded projection at the free end of said spring, a plate rigid with said cover and parallel to said plane, said plate being provided with a circular hole and a notch along said hole adapted to accommodate said rounded projection, the diameter of said hole being so chosen as to force said projection inwardly in a position corresponding to the engagement of said pin with said teeth and said notch being so shaped and dimensioned as to permit the disengagement of said pin from said teeth under the action of said spring, said notch being so positioned along said circular hole as to register with said rounded projection of said spring when said cover is in the fully opened position.

7. A device according to claim 6 in which the portion of said plate which forms the arc of said hole along which said rounded projection is to rub in the course of the pivoting displacement of said cover is made of a hard metal.

GEORGES LÉON ERARD.