# United States Patent

**Macfarlane**

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## [54] REFLECTION APPARATUS FOR SIMULATING THE EFFECT OF USE BY A PERSON OF A COSMETIC OR ARTICLE


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[30] **Foreign Application Priority Data**

May 12, 1969 Australia ..... 54887/69

[52] **U.S. Cl.** ..... **350/291,** 35/58, 272/8 D, 272/8 M

[51] **Int. Cl.** ..... **G02b 5/08**

[58] **Field of Search** ..... 350/288, 291, 172; 35/58, 59; 272/8 M, 13, 8 D



[56] **References Cited**

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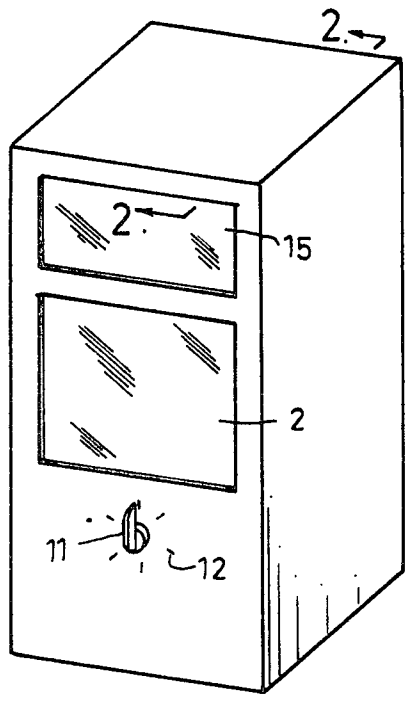
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[57] **ABSTRACT**

An interiorly illuminated enclosure houses a changeable disc selectively movable to present one of a plurality of colors or shapes before an apertured chamber within the enclosure. Upon looking into the chamber through a see-through mirror a user views the selected color or shape superimposed upon their image.


**4 Claims, 6 Drawing Figures**



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2 Sheets-Sheet 1

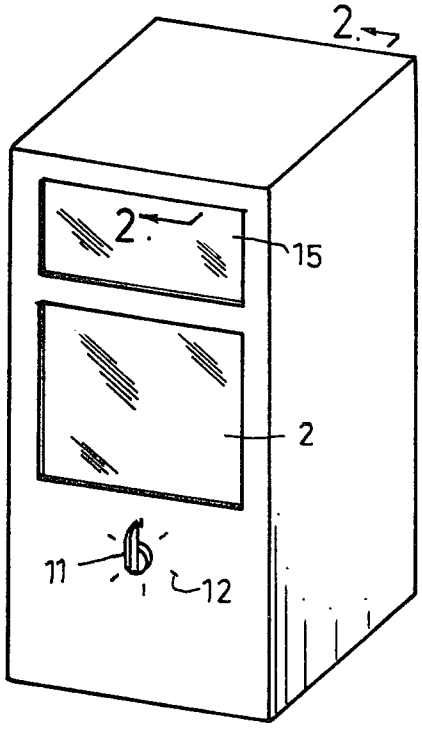



FIG. 1.

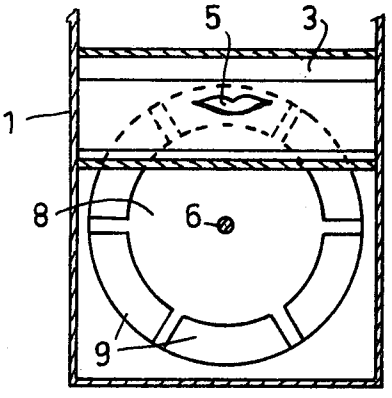
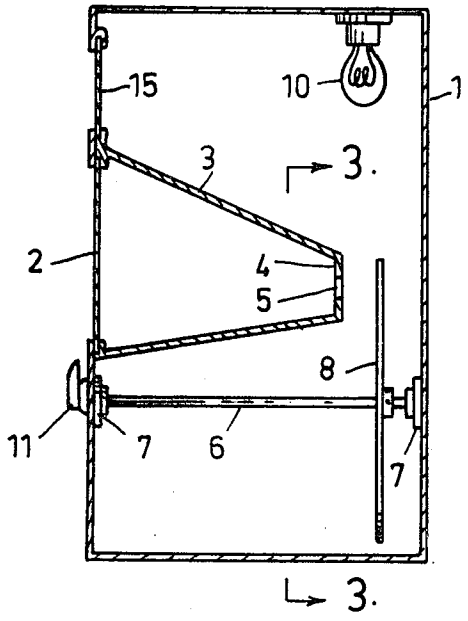



FIG. 3.

FIG. 2.




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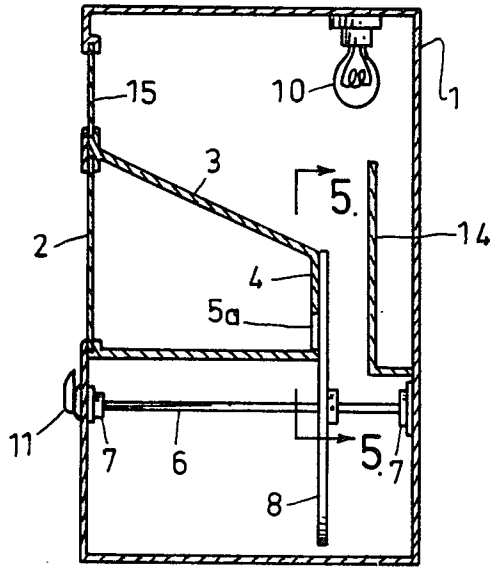



FIG. 4.

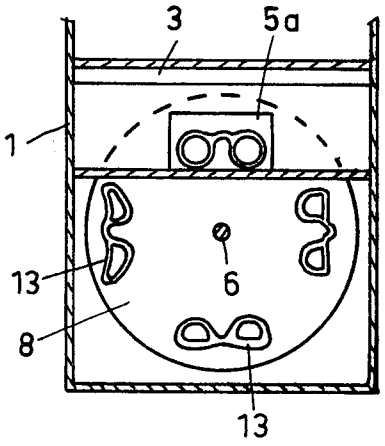



FIG. 5.

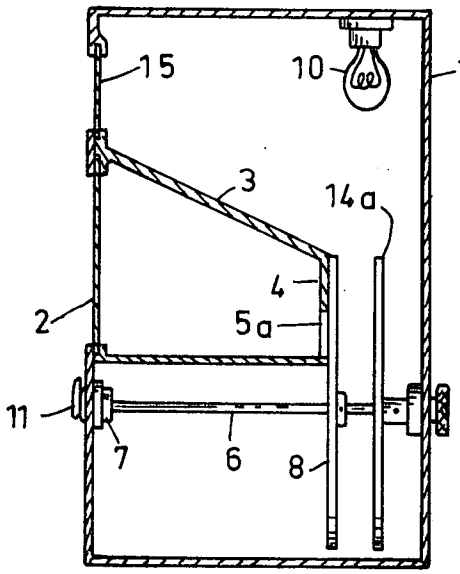



FIG. 6.

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# REFLECTION APPARATUS FOR SIMULATING THE EFFECT OF USE BY A PERSON OF A COSMETIC OR ARTICLE

This invention has been devised to provide a reflection apparatus for simulating the effect of use by a person of a cosmetic or article. Using the apparatus, a viewer will appear to be adorned with a particular cosmetic or article and can personally assess the effect of the adornment. The apparatus is adaptable for rapid change of cosmetics or articles so that the viewer can compare the effect of a range of cosmetics or articles. In the case of lipstick, for example, a woman can see how she would look with various shades of lipstick on her lips without applying them to her lips.

In addition to facilitating the selection of a cosmetic or article by a purchaser, the apparatus will be of economic value to the vendor of the merchandise in as much as stock will not have to be broached to demonstrate the product sought by the purchaser.

Basically, the apparatus comprises a closed cabinet, a chamber with opaque walls in the cabinet, a see-through mirror over one end of the chamber the reflective front face of the mirror being disposed in a wall of the cabinet and being viewable from outside the cabinet, an opaque cover for the other end of the chamber with an opening therein, and means within the cabinet and exterior to the chamber to illuminate the interior of the cabinet to provide a display viewable through the mirror and the opening in the opaque cover and means to vary the display.

By see-through mirror is meant the type of glass which is reflective on one side when the amount of light to that side exceeds the amount of light behind the mirror and which can be seen through when the amount of light behind the mirror exceeds the light in front of it.

The embodiments of the invention are described with reference to the annexed drawings wherein:

FIG. 1 is a perspective view of a container adaptable for demonstrating cosmetics, e.g. lipstick and spectacle frames.

FIG. 2 is a section on line 2—2 of FIG. 1 adapted for demonstrating lipstick.

FIG. 3 is a section on lines 3—3 of FIG. 2.

FIG. 4 is a section similar to FIG. 2 of a modification for demonstrating spectacle frame;

FIG. 5 is a section on line 5—5 of FIG. 4, and

FIG. 6 is a view of another embodiment.

Referring to FIGS. 1 to 3 the container 1 sealed against internal light has a see-through mirror 2 in the front wall with a chamber 3 depending therefrom, at a diminishing acute angle to an end plate 4 having a lip shaped aperture 5 at the inner end. A spindle 6 mounted in bearings 7 in the container and projecting through the front wall has a disc 8 thereon positioned in parallel relationship to the end plate 4. A number of panels of different lipstick colors 9 are made on the disc 8 on a common circle. The panels 9 which are illuminated by light 10 are moved into registration with the aperture 5 in sequences by intermittent rotation of the disc 8. The disc is rotated by a knob 11 on the projecting end of the spindle 6 and at each stop position 12 there are markings to identify the lipstick on display.

A person (woman) viewing her reflection in the mirror sees also a representation of colored lips superimposed on her reflection. By positioning her reflection in the mirror she can locate the image on the reflection of her own lips. As the image covers the reflection of her own lips she would, in fact, see herself adorned with the particular color of the lipstick focus.



Referring to FIG. 4 and 5 the container constructed as described with reference to FIG. 1 has an end plate 4 with an aperture 5*a* occluded by part of the disc 8*a* through which is cut a number of spectacle frame shapes 13. The shapes are arranged on a common circle so as to be sequentially displayed in the aperture 5*a*. Behind the disc 8*a* and spaced therefrom is a back plate 14 illuminated by the lamp 10. The back plate 14 is colored and the spectacle frame shape appearing on the mirror is that color.

A viewer by positioning her (his) reflection can simulate the effect to be obtained by wearing a spectacle frame of that color.

In both embodiments translucent panel 15 is fitted to the container to permit some of the illumination from the globe 10 to pass therethrough to illuminate the face of a viewer.

It will be appreciated that two rotatable discs may be used, one having cutouts e.g. spectacle frames and the other having a series of color patches. The arrangement is similar to that illustrated in FIG. 4 except that the screen 14*a* is circular and is fixed to a sleeve over the shaft 6 and is individually rotatable by for example a knob at the rear of the container, see FIG. 6.

I claim:

1. Reflective apparatus which correctly positions a representation of an object positioned within the apparatus on the image of a viewer of the apparatus, said apparatus comprising a closed cabinet, a chamber with opaque walls positioned in the cabinet, a see-through mirror over one end of the chamber and disposed in a wall of the cabinet so as to be viewable from outside of the cabinet, opaque cover means for the other end of the chamber spaced from the mirror by a distance calculated to approximate the distance that a viewer will stand in front of the mirror, said cover means having an opening corresponding in shape to said object being represented, background means located outside the chamber but inside the cabinet viewable through said opening, said background means and said shape of the opening constituting a display, illumination means within the cabinet but outside the chamber positioned so that said background means will be illuminated so that the display will be viewable through the mirror, and means to vary the display.

2. The apparatus claimed in claim 1 wherein said opening in the cover means has a pre-determined fixed shape, said background means is multi-colored and the means for varying the display includes means for moving said multi-colored background means so that differently colored sections of the background means are selectively positioned in alignment with said opening and spaced therefrom to provide a color changeable display.

3. The apparatus claimed in claim 1 wherein the cover means includes a stationary part with a clearance hole therethrough and a movable part having shaped holes therethrough corresponding in shape to the object being represented and means to selectively position the shaped holes one at a time in registration with said clearance hole so as to provide a shape changeable display.

4. The apparatus claimed in claim 3 wherein said background means is multi-colored and selectively disposable in alignment with said shape changeable display to provide a color changeable display.

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