Feb. 15, 1944. M. TABELLIONE 2,341,960

REFLECTING BUTTON

Filed Dec. 19, 1941

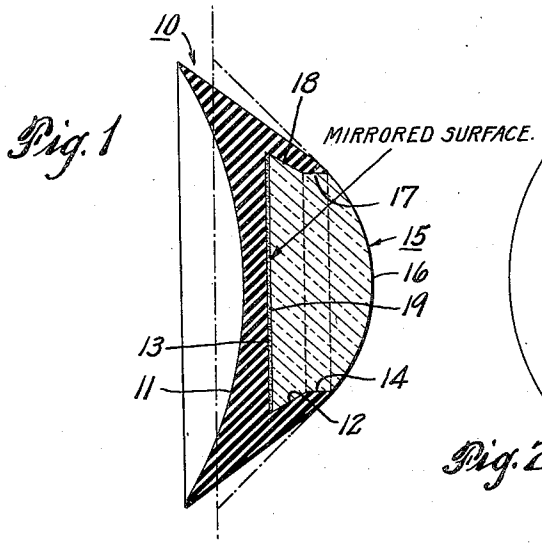


Fig. 1

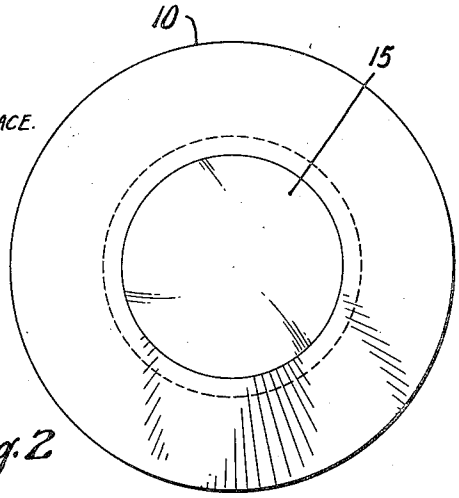


Fig. 2

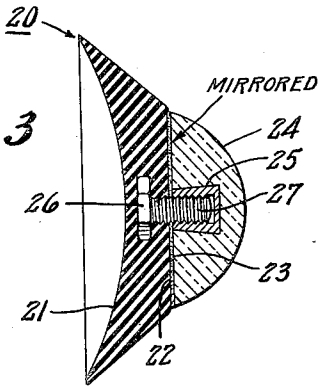


Fig. 3

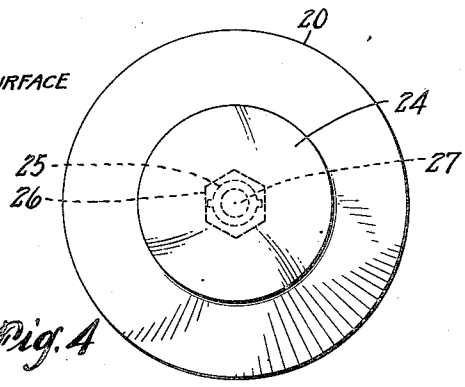


Fig. 4

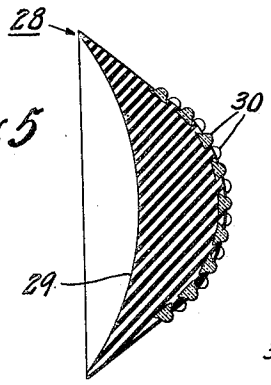


Fig. 5

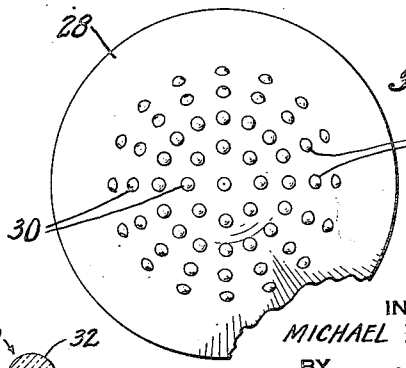


Fig. 6

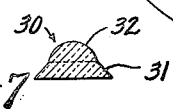


Fig. 7

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REFLECTING BUTTON

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2 Claims. (Cl. 88—82)

This invention relates to reflectors, and more particularly to a reflecting button which is detachably mounted in a rubber suction cup so that it may be attached to any smooth surface by simply pressing it in position.

One object of this invention is to provide a reflector button of the above nature which will be particularly adapted for use on automobiles, trucks, bicycles, and road signs.

Another object of the invention is to provide a device of the above nature which will be simple in construction, inexpensive to manufacture, easy to install and manipulate, compact, non-rattling, non-corroding, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view there have been illustrated on the accompanying drawing, three forms in which the invention may be conveniently embodied in practice.

In the drawing:

Figure 1 represents a sectional view of the first form of reflector button embodying the invention.

Figure 2 is a top plan view of the same.

Figure 3 is a sectional view of the second form of the reflector button also embodying the invention.

Figure 4 is a top plan view of the same.

Figure 5 is a sectional view of a third form of reflector button, also embodying the invention.

Figure 6 is a top plan view of the same.

Figure 7 is a sectional view, on a larger scale, of one of the small reflecting units employed in the third form of the invention.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a soft rubber reflector suction cup base having the usual concave surface 11 which is adapted to be pressed manually against any smooth surface for attachment thereto. The suction cup 10 may be made of any desired color to harmonize with the surface to which it is to be attached.

The suction cup 10 is provided on its top with a conical recess 12 having a flat bottom 13 and a cylindrical upper section 14, as clearly shown in Figure 1. The recess 12 is adapted to detachably receive a transparent reflecting insert member 15 having a convex upper outer surface 16, a cylindrical intermediate section 17, and an outwardly diverging conical bottom section 18, below which is a flat bottom reflector surface 19 of any desired type. By means of this construction, it will be seen that after the insert member 15 has been forced into position within the upper recess 12 of the rubber cup 10 it will be securely retained therein without rattling by the overhanging inwardly extending upper section 14 or said suction cup. By means of this construction it will also be seen that the reflector insert 15 may be readily removed from the elastic rubber suction cup 10 whenever desired in view of the stretchability of the conical portion of said cup.

It will be understood that the insert member 15 may either be placed in the suction cup after the manufacture thereof, or may be placed in the mold in which the suction cup is vulcanized.

Second form

In the modified form of the invention shown in Figures 3 and 4, a reflector suction cup 20 is provided with a concave base 21 as in the first form, but instead of having a conical recess in the top, the cup 20 is provided with a flat upper surface 22 against which a reflecting base surface or mirror 23 of a convex glass reflecting button 24 is held in contact.

In order to secure the button 24 firmly in position and yet permit it to be detached from the rubber suction cup 20 whenever desired, provision is made of an inverted hollow tapped metal socket 25 embedded in said button 24, said socket being preferably provided with a conical diverging outer surface so as to securely anchor it within the glass reflector button.

Provision is also made of a metal screw bolt having a polygonal head 26 permanently embedded in the body of the rubber suction cup 20 during the molding thereof, said screw bolt having a threaded shank 27 upon which the tapped socket 25 of the glass reflector button 24 is adapted to be secured tightly.

Third form

In the third form of the invention shown in Figures 5 to 7, the reflector button comprises a rubber suction cup 28 having a concave base 29 similar to the concave bases 11 and 21 of the first two forms previously described.

In the third form of the invention illustrated in Figures 5 to 7, instead of employing a single reflecting member as in the first two forms, provision is made of a plurality of small-sized glass reflector inserts 30 which are herein shown as arranged in four concentric circular rows surrounding a single central reflector button located at the apex of the suction cup. The reflector inserts 30 are permanently embedded in the suction cup 28 during the process of mold-

ing, and each cup is provided with an outwardly flaring conical beveled bottom section 31, which is surmounted by a convex top portion 32. By means of this construction, a uniformly distributed reflecting action will be obtained throughout the upper part of the reflector button, and the reflection from the rays of light impinging upon the inserts 30 will be directed at various angles depending upon the distance of said inserts from the apex.

While there have been disclosed in this specification three forms in which the invention may be embodied, it is to be understood that these forms are shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosures, but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent is:

1. In a reflector button, a soft rubber suction cup having a concave attachment base and a convex upper section, a plurality of transparent inserts each having a bottom reflecting surface and an outwardly beveled bottom flange embedded in the upper surface of said suction cup at a plurality of scattered points thereupon, said inserts being anchored securely within said suction cup by the material of said cup which extends over the beveled flanges of said inserts.

2. The reflector button as set forth in claim 1, in which said reflecting inserts are arranged in a plurality of circular rows concentric with the vertical axis of said rubber suction cup.

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