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N. BARBIERI

2,270,210

ARTIFICIAL GEM

Filed Oct. 21, 1941

Fig. 1.

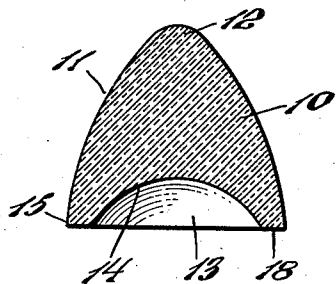


Fig. 2.

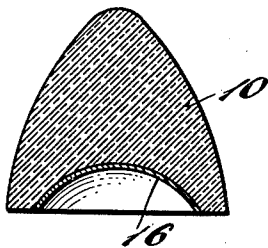


Fig. 3.

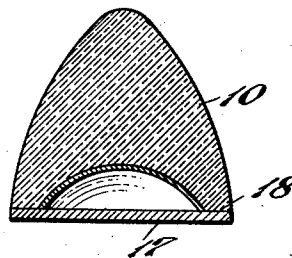


Fig. 4.

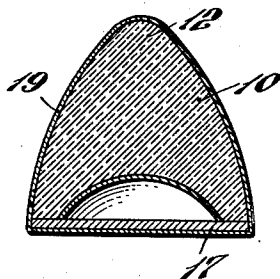


Fig. 5.

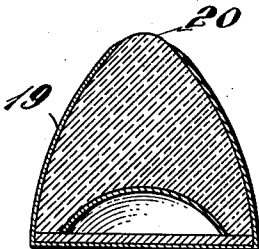


Fig. 6.

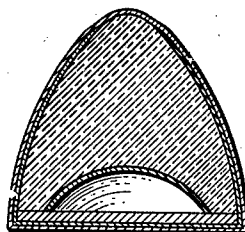


Fig. 8.

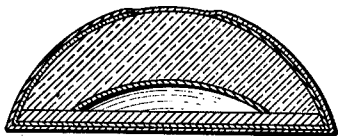


Fig. 7.

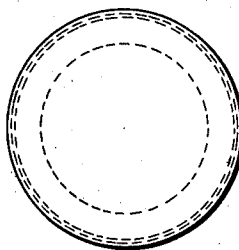
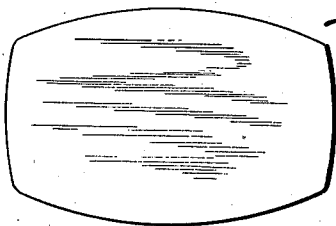


Fig. 9.



INVENTOR
Nicholas Barbieri
BY *Barlow & Barlow*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,270,210

ARTIFICIAL GEM

Nicholas Barbieri, Providence, R. I., assignor to
Uncas Manufacturing Company, a corporation
of Rhode Island

Application October 21, 1941, Serial No. 415,922

7 Claims. (Cl. 63—32)

This invention relates to a gem, more particularly a synthetic plastic gem, sometimes referred to as an artificial stone.

The invention has for one of its objects to provide a gem in which the light will be so reflected as to give the appearance of material moving within the gem, for instance, such as a flowing of some liquid.

Another object of this invention is to provide such light reflecting properties in the gem which will cause the same to be of attractive appearance.

Another object of the invention is to provide a fluorescent effect in the gem.

Another object of the invention is to provide for the reflection of light such as to give the appearance of the bottom moving with reference to the remainder of the gem.

Another object of this invention is to provide an arrangement which may be made in various different colors, and of a variety of different shapes.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawing:

Fig. 1 is a section view showing one step in the preparation of the gem in accordance with this invention.

Fig. 2 shows the gem after a second step has been performed thereon.

Fig. 3 shows the gem after a third step has been performed thereon.

Fig. 4 shows the gem after a fourth step has been performed thereon.

Fig. 5 shows the gem after a fifth step has been performed thereon.

Fig. 6 shows the gem after a sixth step has been performed thereon.

Fig. 7 is a top plan view of the gems shown in Figs. 1-6.

Fig. 8 is a sectional view of a modified form of finished gem.

Fig. 9 is a top plan view of the gem shown in Fig. 8.

In proceeding with this invention I first mold from clear colorless acetate or some similar material the shape of the gem which is to be provided. One example of the gem is designated in Figs. 1-7 and has a body 10 somewhat conical or of mound shape with an obverse surface 11 convex outwardly. The portion 12 of the body 10 most distant from the base is somewhat more round than a cone would be. The lower portion

of the body 10 is recessed as at 13, providing an undersurface 14 which is concave in shape and starts just inwardly from the lower edges 15 of the body to provide a smooth bottom marginal periphery. I have found that this shape material may be molded in an injection mold and will come from the mold in substantially the shape shown in Fig. 1 and just described.

As a second step in the production of this gem I place some sort of colored lacquer 16 in the recess 13 and along the concave surface 14 thereof, and while this lacquer may be of any color I usually use a white lacquer for this purpose. The lacquer will have an acetate base so as to adhere well to the acetate body 10, here suggested as one of the materials which may be used.

A disk 17 of substantially the same shape and size as the periphery 15 of the body will be positioned as shown in Fig. 3 to contact the bottom portion 18 of the body and will there be fastened in place. This base 17 will also be of acetate material and such fastening may occur through heat and pressure, or possibly by the use of some solvent for the acetate material. This disk 17 will also be of the same color as the lacquer 16 and as heretofore illustrated may be of white color so as to harmonize therewith.

The body 10 with the base attached is then colored as shown at 19 in Fig. 4. A convenient manner of the application of such color is by dipping the body with the base 17 thereon in some dye which serves to color the outer obverse surface of the body and the base. This color which is applied to the outer surface has but a small amount of thickness either as a coating or as a penetration into the material.

The next step in the operation is to remove some of the applied color 19 as shown in Fig. 5 which is accomplished by polishing off the color over a small area so as to leave this area devoid of color so that the light may enter in this location through the clear colorless transparent body 10. The gem is at this point complete from the standpoint of the invention which is provided for.

In order that a higher finish may appear on the gem and the color which has been provided may be protected I spray over the obverse colored surface 19 a clear transparent colorless lacquer which gives to the gem a high lustre as well as a protecting coating.

The gems which are here illustrated are shown in Fig. 7 to be of round periphery at the base although I have shown in Fig. 9 a somewhat dif-

ferent contour of shaping which the gem may have.

By the provision of some sort of color, although transparent, over most of the area with an area devoid of this color the light may enter the portion which is devoid of color and be reflected and refracted through the gem body and through the color which is transparent so that when the gem is moved in light the reflecting surface provided by both the lacquer 16 and the base 17 will give the appearance of a liquid at the base moving because of the different reflections and refractions of the light through the convex surface of the gem, and, accordingly, a fluorescent effect from the color and reflection of the parts in the stone appear.

I claim:

1. A gem of transparent material having a convex obverse surface colored except for a relatively small area and provided with a hollow recess in its bottom, colored lacquer in said recess and a base covering said recess and sealing the lacquer therein.

2. A gem of transparent material having a convex obverse surface colored except for a relatively small area and provided with a hollow concave recess in its bottom, colored lacquer coating the concave surface in said recess and a base covering said recess and sealing the lacquer therein.

3. A gem of transparent material having a convex obverse surface colored except for a relatively small area distant from the base and pro-

vided with a hollow recess in its bottom, colored lacquer in said recess and a base covering said recess and sealing the lacquer therein.

4. A gem of transparent material having a convex obverse surface colored except for a relatively small area and provided with a hollow recess in its bottom, colored lacquer in said recess and a base of the same color as said lacquer covering said recess and sealing the lacquer therein.

5. A gem of transparent material having a convex obverse surface colored except for a relatively small area distant from the base and provided with a hollow recess in its bottom, colored lacquer in said recess and a base of the same color as said lacquer covering said recess and sealing the lacquer therein.

6. A gem of transparent material having a convex obverse surface colored except for a relatively small area and provided with a hollow recess in its bottom, colored lacquer in said recess and a base covering said recess and sealing the lacquer therein and a clear lacquer covering the entire obverse face.

7. A gem of transparent material having a convex obverse surface colored except for a relatively small area distant from the base and provided with a hollow recess in its bottom, colored lacquer in said recess and a base of the same color as said lacquer covering said recess and sealing the lacquer therein and a clear lacquer covering the entire obverse face.

NICHOLAS BARBIERI.