S. HASHIMOTO.

IMITATION STONE AND PROCESS FOR MANUFACTURING.

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1,377,130.

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Fig. 1

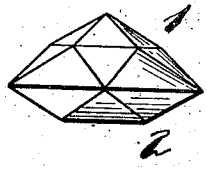


Fig. 2

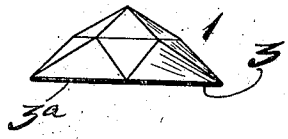
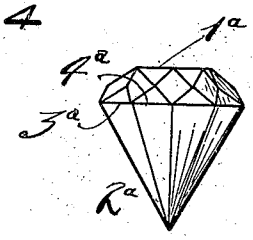


Fig. 3



Fig. 4



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IMITATION STONE AND PROCESS FOR MANUFACTURING.

1,377,130. Specification of Letters Patent. Patented May 3, 1921.

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To all whom it may concern:

Be it known that I, SHOZABURO HASHIMOTO, a subject of the Emperor of Japan, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Imitation Stones and Processes for Manufacturing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to imitation gems or precious stones, and to the process of making them.

An object of this invention is the production of ornaments or imitation gems from cheap, transparent materials, said imitation gems having the apparent coloring and refractory power of the real gems.

The invention consists of two parts of cut glass, quartz, or other suitable transparent material, preferably of mineral origin, cemented together, one or both of the surfaces in contact being coated with coloring material. It also consists in the process of making said composite imitation gems.

In the accompanying drawing:

Figure 1 is a side elevation of an imitation gem made of a plurality of united parts according to my process;

Fig. 2 is an elevation of the top part thereof;

Fig. 3 is an elevation of the bottom part thereof;

Fig. 4 is an elevation of another conventional form of gem cut for setting in a ring or other ornament.

The imitation gems of this invention are made in a plurality of parts cemented or otherwise united together. In the embodiment shown in the accompanying drawings the gems are made of two parts, each part having suitable facets formed thereon, as is usual in cut gems, and a plane surface adapted to be brought into engagement with the plane surface of the other part to form the completed article. One of said two parts is indicated in Figs. 1 to 3 by numeral 1 and the other by the numeral 2. The part 1 is designed to serve as a face or exposed portion of the imitation gem, the part 2 serving as the back portion thereof. The plane surface 3 of the part 1 is coated with a coloring substance 3^a, such coloring substance being preferably applied in liquid form and permitted to dry. The pigment or coloring matter may be of any shade desired and the kind of pigment will be determined by the color of the gem which it is desired to imitate.

After having applied the colored coating to the surface 3 of the part 1, a thin layer of suitable transparent cement is applied preferably to the surface 4 of the part 2, although it may be applied to the coated surface. This layer of cement is indicated in the drawings by the character 4^a and is preferably a border or marginal coating thereon.

After the colored coating on the part 1 has dried, and while the cement is in a tacky condition, the two parts 1 and 2 are brought together with their surfaces 3 and 4 in registration and the cement coating 4^a allowed to harden or set.

Both the coloring matter and cement are applied, preferably, in a thin layer. The joint between the two parts preferably occurs at an angle between facets on the upper and lower parts of the imitation gem so that the said joint is only discoverable with difficulty.

The rays of light penetrating the transparent glass or other suitable material impinges upon the thin layer of coloring matter within. The thin layer of pigment reflects therefrom rays of light of a color dependent upon the color of the pigment and transmits similarly colored rays. It will be apparent that these reflected and transmitted rays striking the facets will be reflected and refracted in all directions and that the imitation gem will appear to have a translucent coloring matter throughout its substance.

By this process I am enabled to produce gems in imitation of the emerald, ruby, sapphire, or other precious stones of such excellent appearance as to render them indistinguishable from genuine stones to the ordinary observer.

In making the described imitation gems the separate parts may first be cut, then coated and cemented together, or the two parts may first have the flat joining surfaces formed on them colored and cemented together and afterward cut in the same manner as precious stones are usually cut.

The plane of junction is preferably transverse of the stone across its greatest dimension and transverse of the axis of the setting

with the seam at the angle between the lower facets of the face portion and the upper edge of the facets of the lower portion.

In Fig. 4 the upper portion of the imitation gem is indicated by 1^a, the lower portion by 2^a and the adjoining surfaces by 3^a and 4^a respectively.

Having described my invention in such manner as to enable those skilled in the art to which it appertains to make and use the same, what I claim is:

1. An imitation gem consisting of a plurality of parts of transparent material united together, there being a coating of translucent coloring material between the juxtaposed faces of the said parts.

2. An imitation gem comprising two parts of transparent material united together, there being a layer of translucent coloring material between the juxtaposed faces of said parts, said juxtaposed faces lying in a cross sectional plane of greatest dimensions of the imitation gem transverse of the axis thereof.

3. An imitation gem comprising two parts of transparent mineral material, having plane faces in juxtaposition, there being a layer of translucent coloring material between the juxtaposed faces of said parts, said imitation gem having facets and the plane of union between the parts intersecting the angles of adjacent facets.

In testimony whereof I affix my signature.

SHOZABURO HASHIMOTO.