(No Model.)

W. NÄF.

ARTIFICIAL STONE.

No. 455,924. Patented July 14, 1891.

Fig. 1.

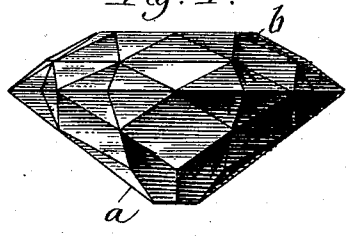


Fig. 2.

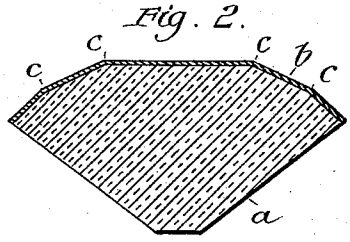


Fig. 3.

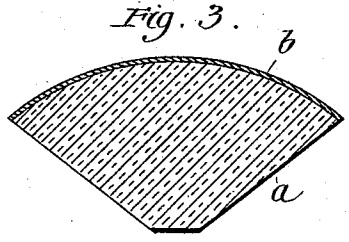
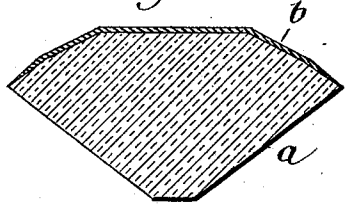


Fig. 4.



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ARTIFICIAL STONE.

SPECIFICATION forming part of Letters Patent No. 455,924, dated July 14, 1891.

Application filed October 23, 1890. Serial No. 369,122. (No model.)

To all whom it may concern:

Be it known that I, WALTER NÄF, of the city, county, and State of New York, have invented a certain new and useful Improvement in Artificial Stones, of which the following is a full, clear, and exact description.

The invention relates to that class of stones known as "doublets" and composed partly of strass or other artificial material and partly of genuine stone.

The object of the invention is to so improve gems of this character as to minimize the color effects of the genuine stone, and thus better preserve the distinctive color of the artificial body, while effectively protecting the latter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a stone embodying my invention. Fig. 2 is a section therethrough. Fig. 3 is a section illustrating a stone of different shape, and Fig. 4 is a section illustrating a slight modification.

In the actual practice of manufacturing doublets garnet is most largely employed for the slab or genuine facing, because of its ability to fuse with the artificial stones. Thus when the whole of the part above the girdle was formed of the garnet the artificial body was required to be so thick to effectually dissipate the garnet color that the large size of the completed stone rendered setting difficult. In forming only a part of the upper portion of the stone of garnet heretofore an objection was present in the concentration of color at the angles of the facets, such portions being the thickest. To avoid this latter objection, the garnet has been applied to the table only of the stone—that is, its extreme top—and while this in a measure avoided the concentration of color in the facing it left the stone between the table and the girdle unprotected.

In my invention the genuine facing covers the stone above the girdle, and I reproduce on its interior surface, essentially, the shape of its exterior and form the top of the artificial body to correspond.

The major part of the genuine covering is of uniform thickness, and it corresponds, essentially, with the contour of the artificial body above the girdle. By this construction, therefore, the strass is effectively protected, the hardness of the genuine slab availed of to good advantage, and the color effect of the latter minimized or wholly dissipated.

In the several figures of the drawings the letter *a* indicates the body, and *b* the genuine facing.

In Fig. 2 the angles formed by the facets are indicated by the letter *c*.

In Fig. 3 the stone is of plain convex form.

In Fig. 4 I have shown the genuine facing gradually tapered off toward the girdle. As this only affects the lowermost series of facets, and not the angles, it has no real effect either on the color or brilliancy of either part of the stone, and may therefore be availed of in practice. I prefer, however, not to so taper the facing, as it serves no particular purpose.

The invention enables me to produce a stone high above the girdle and fully protect the same without affecting its color or brilliancy.

The invention is also applicable to diamond doublets and enables me to apply a genuine facing so small relatively to the body that no combinations of shades or colors results, the purity of the "white" body being fully preserved, while the body is effectually protected against friction.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A doublet consisting of an artificial body and a genuine facing extending to the girdle of the doublet, the artificial body above the girdle projecting into the genuine facing, substantially as described.

2. A doublet consisting of an artificial body and a facing of genuine stone covering the artificial body above the girdle, said covered

portion of the artificial body projecting into the said facing and the contour of the facing corresponding, essentially, to the contour of said body above the girdle, substantially as described.

3. A doublet or artificial stone consisting of a body of artificial material and a facing of genuine stone, said facing corresponding, essentially, to the upper contour of the body and extending to the girdle, the major portion of the facing being of uniform thickness, substantially as described.

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Witnesses:
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