2 Sheets--Sheet 1.

G. L. VOSE & A. S. SOUTHWICK.

Manufacture of Jewelry.

No. 234,152. **Patented Nov. 9, 1880.**

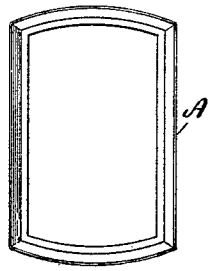


Fig. 1.

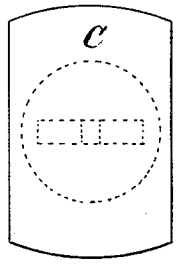


Fig. 2.

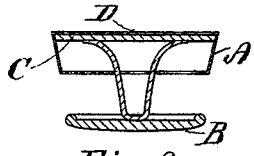


Fig. 3.

Witnesses.

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2 Sheets—Sheet 2.

G. L. VOSE & A. S. SOUTHWICK.

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Fig. 4.

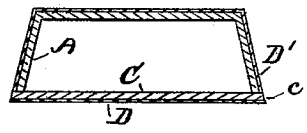


Fig. 5.

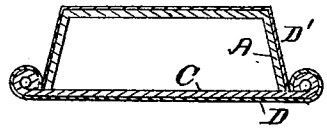
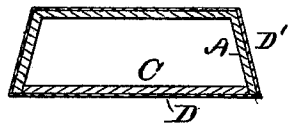


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE L. VOSE AND ANDREW S. SOUTHWICK, OF PROVIDENCE, R. I.

MANUFACTURE OF JEWELRY.

SPECIFICATION forming part of Letters Patent No. 234,152, dated November 9, 1880.

Application filed February 24, 1880.

To all whom it may concern:

Be it known that we, GEORGE L. VOSE and ANDREW S. SOUTHWICK, citizens of the United States, residing at Providence, in the State of Rhode Island, have invented an Improvement in the Manufacture of Jewelry, of which the following is a specification.

Our invention consists in the combination of an engraved gold plate with a backing of rolled base metal, made smaller than the surface of the gold plate, in order that when attached to each other the gold plate may extend on all sides from the edge of the backing and cover the edge of a rim made to inclose the edge of the backing-plate. We are by this means enabled to make a close imitation of real gold jewelry with desirable strength and durability.

Figure 1 represents a plan view of the rim for forming a button. Fig. 2 represents a plate of sheet metal cut out to form the solid backing for the gold plate. Fig. 3 is a vertical section of the complete button. Fig. 4 represents a transverse section of an article of plated jewelry, showing a common method of manufacture. Fig. 5 represents a transverse section, illustrating the improvement patented by John Barclay, August 24, 1879. Fig. 6 represents a transverse section of our improvement.

In the accompanying drawings, A is the rim, struck up from plated or other suitable stock. B is the attached shoe. C is the plate, of German silver or other metal, preferably made thicker than the rim A, and cut out to exactly fit within the upper portion of the interior of the rim. The rim A and the metal plate C are joined by means of solder, so that the upper edge of the rim may be slightly above the upper surface of the plate, after which the rim is ground down to a level with the plate.

The surface of the gold plate D is made larger than the base-metal plate C by twice the thickness of the rim A, to which it is attached, in order that the plate of gold may extend beyond the edge of the plate C on all sides and cover the edge of the rim A, and after the plate D has been attached to the plate C, as above described, it may be engraved, as usual in the manufacture of jewelry.

The ordinary method of manufacturing similar goods is by striking up a piece of plated or other suitable stock with a recess in the front and a rim, all in one piece, and after filling the recess with soft solder and grinding to a uniform surface sweating on the gold plate. In this case the filling of solder forms a comparatively soft backing for the plate, which yields to the action of the graver, and thus develops an uneven surface which detracts from the finished appearance of the goods, and the strip of gold is liable to turn up at the edges and peel off, and in attaching the gold plate the soft-solder filling is liable to escape at the edge and tarnish the outer surface.

In our case the gold is soldered direct to a hard-metal backing, and is thus properly supported under the action of the graver, and the gold is more firmly secured, thus avoiding the danger of turning up at the edges and securing a uniform finished appearance; and also heretofore, in the manufacture of plated jewelry, the base-metal plate C has been made equal in area with the gold plate D, so that the edge *c* of the base-metal plate would be exposed, as shown enlarged in Fig. 4, the edges of the gold plates D and D′ being separated by the edge *c* of the base-metal plate.

The exposure of the edge *c* of the base-metal plate has been overcome in the improvement patented by John Barclay, August 24, 1869, and reissued December 6, 1870, by turning over the edge of a strip of plated stock, as shown in Fig. 5, by which means the gold plates D and D′ are made to touch each other so as to conceal the edge of the base metal; but the object of our invention is to produce the same effect shown in Fig. 4, and at the same time effectually join the edges of the gold plates D and D′, so as to completely cover the edge of the base metal. The articles so produced can only be distinguished from genuine gold jewelry by means of a cross-section made to reveal the previously concealed internal characteristics.

Our improvement is represented also enlarged in Fig. 6, the plate C being let into the rim A and the gold plate D made to cover the edge of the rim A and extend beyond the edge of the plate C to meet the edge of the gold plate D′, thus completely covering all

base metal and making a compact substantial article of jewelry, free from undesirable flanges or projections.

We claim as our invention—

In the manufacture of an article of jewelry wherein a plate of base metal is employed covered by a gold plate, the combination of the rim A and the base-metal plate C with the gold plate D, made to extend on all sides beyond the edge of the base-metal plate C, and to cover the edge of the rim A, substantially as described.

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ANDREW S. SOUTHWICK.

Witnesses:
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JOSEPH J. SCHOLFIELD.