A. VESTER.

Plated Jewelry.

No. 216,586. Patented June 17, 1879.

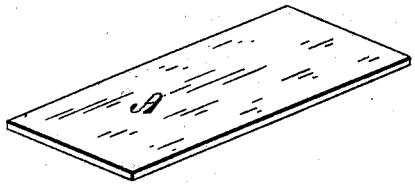

FIG. 1.

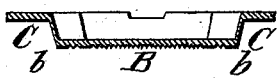

FIG. 2.

FIG 3.

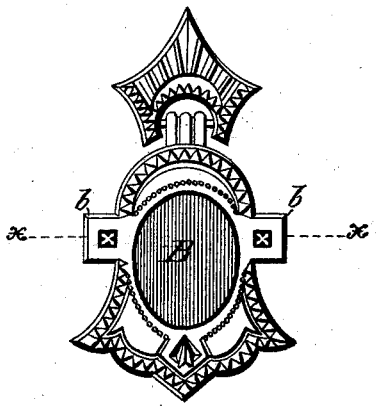

FIG. 4.

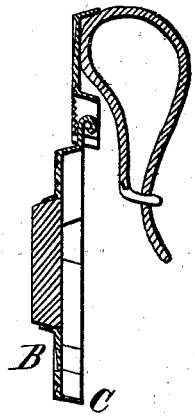

FIG 5

WITNESSES.

Socrates Scholfield

Joseph J Scholfield

INVENTOR.

Silvish Vester

UNITED STATES PATENT OFFICE.

ADOLPH VESTER, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN PLATED JEWELRY.

Specification forming part of Letters Patent No. **216,586**, dated June 17, 1879; application filed September 7, 1878.

To all whom it may concern:

Be it known that I, ADOLPH VESTER, of Providence, in the State of Rhode Island, have invented an Improvement in the Manufacture of Jewelry, of which the following is a specification.

My invention relates to the manufacture of what is known in the trade as "bright jewelry," formed from plated stock; and it consists of a certain improved process in the manufacture and in an improved article.

Heretofore, in the manufacture of articles of jewelry made of plates of solid gold, it has been customary, usually, to attach the rim by soldering to the plate, which had been swaged into proper shape, and then to form the ornamental part of the face by hand-engraving. This is obviously not practicable in making articles of plated stock, because the engraver's tool would, in the process of engraving, cut through the plated surface and expose the baser metal underneath.

It has heretofore been the practice in making bright jewelry from plated stock to strike up the plated stock into the proper form, and then to form the ornamental work by the process of indentation technically called "chasing," using for that purpose a properly-pointed tool, and by blows indenting the surface to be ornamented. In this way the ornamental work corresponding to the engraving which is applied to the solid or all-gold jewelry could be formed upon the plated stock without exposing the baser metal beneath the plated surface; but it has been necessary in the process heretofore practiced to use thin plates for the successful practice of the operation, and in order that that part of the metal turned back to form the rim might not be too thick and clumsy in appearance. Further than this, it has been necessary, in order to perform successfully the process of indentation, to fill the back of the article, after it was struck up, with melted lead. The bright surfaces were then chased or subjected to the described process of indentation and afterward polished. After the operation of chasing was completed the lead was removed from the article by melting it out; but the interior of the article was left rough by the indentations, which showed through from the exterior, and by the traces of lead which could not be entirely removed. These indentations and the traces of the lead rendered the interior surface unsightly, and made it necessary that the back should be covered by soldering on an additional plate. This increased the expense and rendered the article less desirable on account of the increased weight as well as by reason of the cheap appearance.

The object of my invention is to form in an inexpensive manner from bright plated stock jewelry which shall have a thin edge, and the interior surface smooth and presentable in appearance, and at the same time have upon the face those ornamental surfaces similar to the engraved or chased surfaces of the all-gold jewelry, and which are necessary to the appearance of what is known as "bright jewelry."

In carrying out my invention I take bright plated stock of considerably greater thickness than that heretofore used in the manufacture of jewelry, and before performing any other operation I first give it the polish necessary for the finished article. This previous polish I have found to be necessary, for the reason that if the surfaces be polished after the article is struck up and the bright surfaces impressed in the die with the ornamentation or chasing, the appearance of the latter will be injured by the operation of polishing. After the plate is thus polished I strike it up by means of suitable dies into the finished article, having the dies so constructed that the ornamentation or chasing shall be impressed upon the surface simultaneously with the formation of the article, and having the dies also so formed that the turned-back edge of the article shall be drawn out thinner than the metal of the face of the article. At the same time the thickness of the metal in the face of the article is so adapted to the engraving upon the dies that the impressions upon the face do not show through upon the back.

In the drawings hereunto attached and forming part of this specification, Figure 1 represents a perspective view of a thick piece of bright rolled gold-plate, such as is used in making my improved bright plated jewelry. Fig. 2 represents a sectional view of the plate

when struck up in the die, showing the comparative thickness of the front plate and the inclosing-rim. Fig. 3 is a sectional view taken on the line *x x* of Fig. 4. Fig. 4 is a front view, showing the finished pendant of an earring made in accordance with my invention. Fig. 5 is a sectional view, showing such an open-backed pendant furnished with a setting.

In forming the dies used to carry out my invention, I engrave the lines and indentations in the surface of the bob, so as to produce the corresponding raised portions of the die, and I then plane off the surface of the struck-up steel former, so that under the drop the lines or raised portions of the die may be impressed upon one side of the plate only, the opposite side being made plain, as when a similar piece of all-gold jewelry is engraved or engine-turned. The parts of the die are so adapted to each other that the edges shall be drawn in turning back, so as to reduce them to a proper thickness, and the metal so drawn as not to rupture the plating at the corners.

For the production of perfect work, as well as for the purpose of rendering the manufacture cheap and expeditious, it is necessary that all this should be accomplished at one operation. As what is technically called the "chasing" upon the bright surface is formed by indentation, these surfaces, although they have been previously polished, are not at all marred by the dies, and require only to be rubbed with leather to render them completely finished. As no polishing operation subsequent to that of the dies is necessary, the impression of the dies is left sharp and clear, and none of the lines are dulled, as they would be were the polishing operation performed after the article had been stamped out.

I am aware that articles of jewelry have been made of plated stock struck up in dies with surface-ornamentation, raised in the form of beading and the like, said surfaces being so treated as to form the yellow or Roman gold appearance.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

As an improved article of manufacture, bright plated jewelry, formed with the face-plate thicker than the flanges, with a smooth plain back, and with ornaments or chasing stamped into the surface, as set forth.

ADOLPH VESTER.

Witnesses:
SOCRATES SCHOLFIELD,
GEORGE MANGELSDORF.