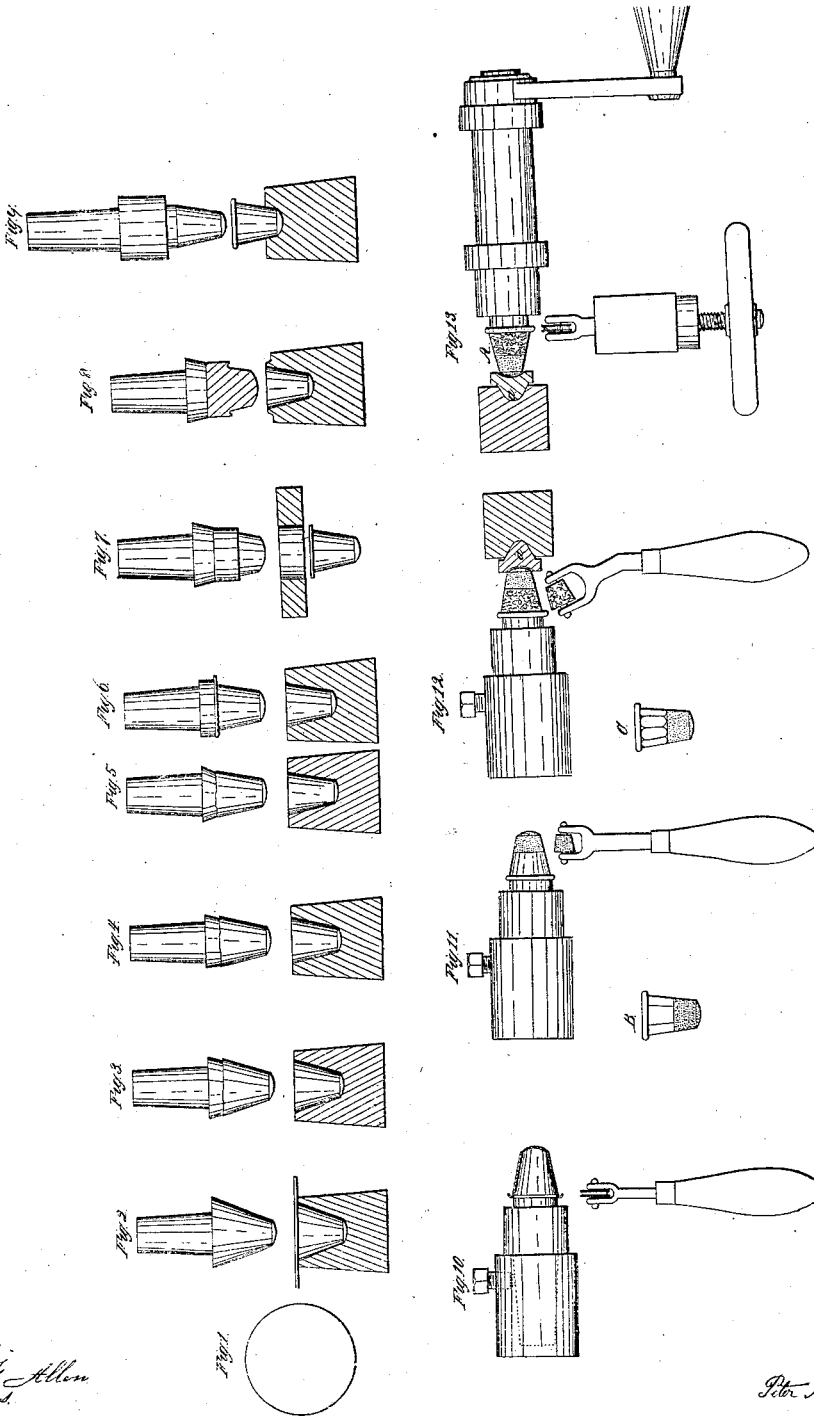


F. S. Bishop,
Making Thimbles,

Patented Sept. 20, 1859.

No. 25,482,



Witnesses,
Edwin T. Allen
Samuel Lloyd.

Inventor,
Peter S. Bishop

UNITED STATES PATENT OFFICE.

PETER S. BISHOP, OF SMITHFIELD, RHODE ISLAND.

IMPROVEMENT IN THE MANUFACTURE OF THIMBLES.

Specification forming part of Letters Patent No. 25,482, dated September 20, 1859.

To all whom it may concern:

Be it known that I, PETER S. BISHOP, of Smithfield, in the county of Providence and State of Rhode Island, have invented a certain new and useful article of manufacture, which I term a "Plate Thimble;" and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

A, Fig. 13, B, and C represent views of my improved article of manufacture.

In order that the nature of my invention may be understood and to distinguish the article made by me from the thimble in common use with which in appearance it is identical, I will proceed to state in what its novelty consists.

The stock now in general use among manufacturing jewelers consists of a base metal overlaid on one or both sides, as may be necessary, with gold of sufficient thickness to resist the action of acids. Whenever stock of this description can be used the manufactured article is produced at a cost proportionally less than if made entirely from metal of a better quality, while in point of durability the article made from the plated or overlaid metal is often preferable. All attempts at making a thimble of this description of stock have hitherto failed for the following reasons: In order for the thimble to be worn with comfort, as well as to be salable, it is necessary for the interior to be perfectly smooth and free from indentations. The universal means of accomplishing this in all gold or silver, and even in the better grades of brass thimbles, has been to place the thimble in a chuck and turn out the inside with a tool. This operation manifestly cannot be performed upon a thimble made from plate stock, and consequently unless some means are employed to obliterate or to prevent the indentations on the inner surface caused by the operation of milling a thimble made from this description of stock would from this cause be of inferior value either as an article for use or for sale.

Without claiming that any one of the successive operations or processes which I employ to produce a perfect thimble from plate stock is novel, I will state generally how the new article of manufacture which I claim as mine is produced.

Figure 1 represents a blank of base metal

overlaid on both sides with one of the precious metals. Figs. 2, 3, 4, 5, and 6 represent a series of dies and "formers" varying slightly in shape, to the action of each of which the blank is subjected. Fig. 7 shows a combined die, former, and cutter by which the rim of the blank thimble previously turned outward is cut smooth and round. Fig. 8 shows a die with a former of such a shape that the rim of the blank will be turned toward the tip of the thimble, as the edge of a cup is turned over by a tinman's roll. Fig. 9 shows the blank undergoing the process of milling on the end, the punching-former to effect this being perfectly smooth and the bottom of the die being indented.

The former which was used in the last operation fitting the thimble perfectly is now used as a mandrel for the subsequent operations. The former, with the thimble upon the end, is placed in a lathe-head, the milled end of the thimble resting in a back center, as shown at *a*, Fig. 12. The rim is then burnished down flat and smooth or milled and the sides of the thimble ornamented and milled, as shown in Figs. 10, 11, 12, and 13. A, Fig. 13, B, and C, as before stated, exhibit three patterns of thimbles, the variety of which can be increased almost indefinitely. The result of these operations is a thimble which when cleaned and polished is in no respect inferior in point of beauty or utility to the thimbles made entirely from metal of the same grade as that with which the stock in the instance described is plated, and which is produced at one-third the cost of a thimble made in the usual way.

The secret of my success consists in the fact that I make use of a polished former and mandrel so closely fitted to the thimble that in the several operations of milling the appearance of any indentation on the inner surface of the thimble is prevented.

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

The new article of manufacture herein described—namely, a thimble made from plated or overlaid metal, either in the common form, with fluted sides, or with sides in the form of a regular geometrical figure, the whole article being substantially such as specified.

PETER S. BISHOP.

Witnesses:

I. PLANKINTON,
WILL FLAKE.