## IS Fallet, Tinger Ting. No.110,589.

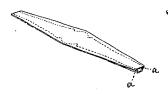
Intented Ilec. 21, 1810.

FIG.I.



F/G.3.





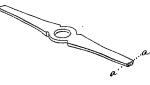


FIG.4.

FIG.5.

F1G.6.



F1G.7.



F1G.9.



Witnesses. Phil. A. Larner. Trank & Jackson,

Hollovney.

## United States Patent Office.

## JOHN S. PALMER, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 110,587, dated December 27, 1870.

## IMPROVEMENT IN FINGER-RINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, John S. Palmer, of the city and county of Providence, in the State of Rhode Island, have invented certain new and useful Im-

provements in Finger-Rings.

My invention relates particularly to that class of finger-rings which is made of any suitable base sheet metal, plated and rolled with precious metals on both surfaces, and consists in uniting the two edges of the precious metal at a point where contact between the joint and the finger is not liable to occur; and I do hereby declare that the following specification, taken in connection with the drawing furnished and forming a part of the same, is a clear, true, and exact description thereof.

Figure 1 represents a finger-ring constructed un-

der my improvement.

Figure 2 represents a plate direct from the die, in which the body of the ring is formed, and exhibits the rim of waste metal.

Figure 3 represents the body of the ring with the

waste metal detached.

Figure 4 represents a stone-bearing embossment, to be attached to the exterior of the body of the

Figures 5 and 6 represent cross-sections of the

body of the ring, as shown in figs. 2 and 3.

Figure 7 represents the perfect ring, fig. 1, with a

portion of its side cut away.

Figure 8 represents a ring in section, like fig. 7, manufactured of the same kind of metal, in the manner heretofore practiced.

Figure 9 represents a ring in section, like figs. 7 and 8, manufactured of rolled sheet metal struck up in-a die, filled with soft solder or other similar metal, and then lined with single rolled plate.

Persons skilled in the art are well aware that both single and double plate have been used in the manu-

facture of finger rings.

This plate is composed of a sheet of base metal, having one or both of its surfaces plated with a layer of precious metal, and all rolled down together to the desired thickness.

If made of a single plate, the body of the ring is struck up in a die, in the form of a concave shell, the interior of which is filled with soft solder or other metal, as may be desired. Fig. 9 represents, in section, a ring of this character.

In section, the gold surface extends from the inner periphery of one side of the ring across its outside, to the inner periphery of the other side. These edges are indicated in fig. 9 as a a. The lining b, also of single plate, is then slipped into the ring, and

the edges a a are soldered thereto.

If double plate is used, the intermediate metal is entirely embraced by the precious metal on the two plain outer and inner surfaces, as in the original plate, and also on the two edges, by the drawing action of the dies upon the gold.

A female die and a face-plate, for instance, may be used, forming a blank like fig. 2, from which the waste metal is trimmed or cut, as shown in fig. 3. The cut portion or edge is then carefully burnished, and the two gold edges thereby united as far as prac-

Up to this point there is nothing in the mode of manufacture described which constitutes any portion

of my invention.

The rings are then formed upon an arbor, and the circular point of connection is made by soldering in the well-known manner.

Heretofore the points a a, as shown in the several figures, have been brought into contact with the arbor, bringing, as will be observed in figs. 8 and 9, the points of contact between the upper and lower or inner and outer gold surfaces, as indicated by the letters a a at the inner edge or periphery of the ring.

My invention consists in so forming the ring, from the metal prepared as described, that the points of contact a a, fig. 7, between the inner and outer gold surfaces, shall be at the outer periphery of the ring.

Persons skilled in the art are well aware that joints made in either of the modes described cannot be made so perfect that the baser metal will be entirely protected or covered.

If other than gold solder be used, that which will be left upon the surface to a greater or lesser extent

will be liable to corrode or oxidize.

In either case the base metal exposed will oxidize from constant contact with the skin and the corrosive action of perspiration, and to a greater or lesser extent poison or discolor the finger. The junction of the metal becomes also marked and open, or otherwise disfigured.

A ring constructed under my improvement, with the connecting-joint between the edges of the precious metal at the outer periphery, as described, is free from these objections, as an unbroken continuous surface of gold is brought in contact with the finger while the ring is being worn.

A ring, constructed as described by me, is also less liable to cut the finger, as the sides of the ring are beveled outwardly, leaving the inner periphery with edges less clearly defined than the outer.

My invention is also applicable to the manufacture of band-bracelets, as will be readily understood by persons skilled in the art.

Having thus described my invention,

I claim as new and desire to secure by Letters

1. That improvement in the manufacture of plated metal finger-rings and bands, which consists in uniting the inner and outer gold surfaces at a point remote from their inner peripheries, substantially as and for the purposes specified.

2. As a new article of manufacture, the finger-

ring herein described, made of base metal plated with precious metal, and having its inner and outer plated surfaces connected at the outer periphery of the ring.

JOHN S. PALMER.

Witnesses: EBEN W. WATERHOUSE, GEORGE N. CAPRON.