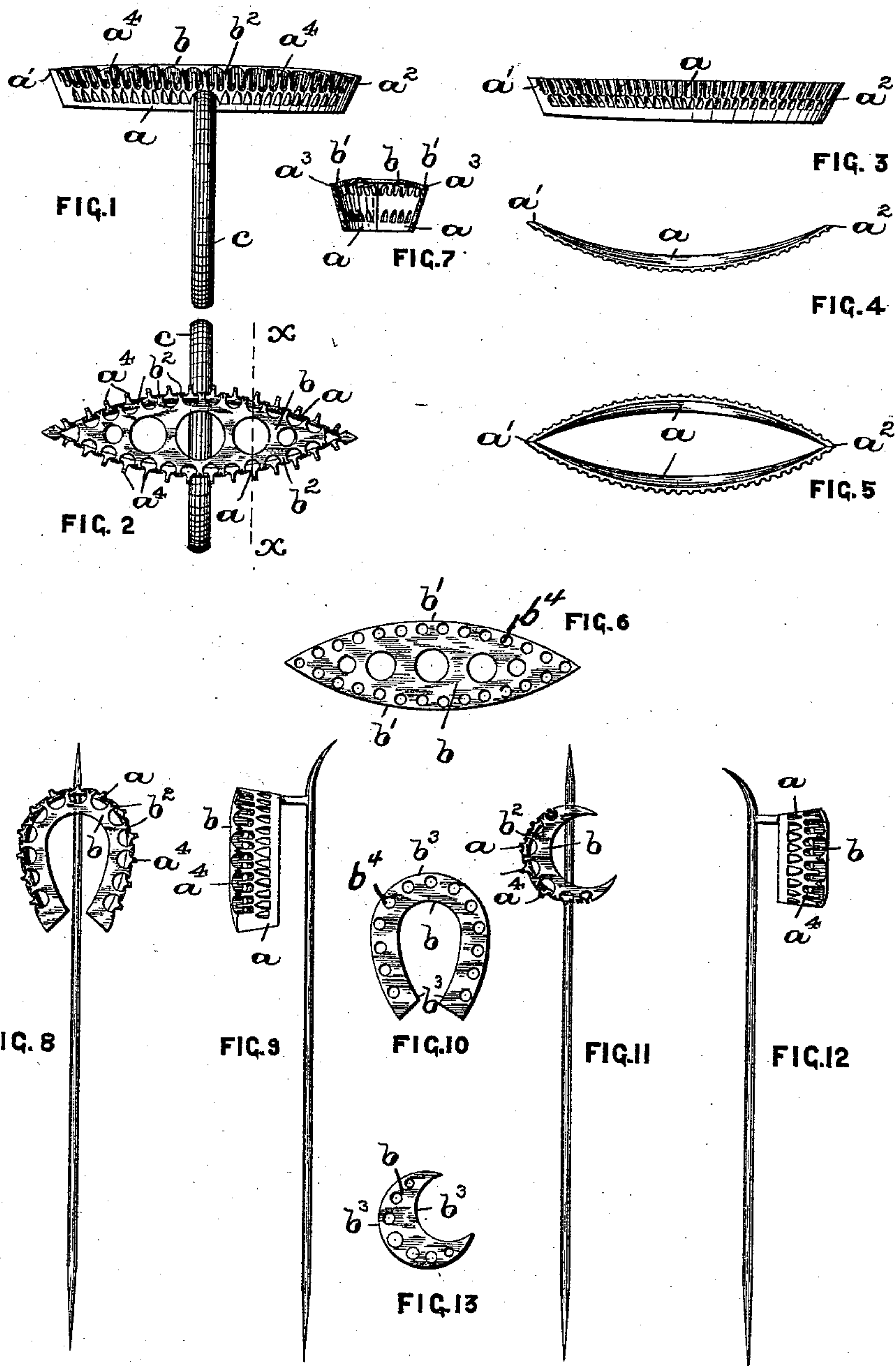


(No Model.)

E. SCHILL.  
JEWELRY.

No. 532,587.

Patented Jan. 15, 1895.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EMIL SCHILL, OF NEWARK, NEW JERSEY.

## JEWELRY.

SPECIFICATION forming part of Letters Patent No. 532,587, dated January 15, 1895.

Application filed July 25, 1894. Serial No. 518,519. (No model.)

*To all whom it may concern:*

Be it known that I, EMIL SCHILL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Jewelry; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to a new method of securing together the several parts of the settings for clusters, used in rings, especially such as are known as the marquise ring, and other jewelry in general, as stick or scarf pins, and the invention consists substantially, in first partially producing or partially striking up the design in the separate parts to be made in a piece of jewelry; secondly, in soldering or otherwise securing these parts together, in the manner to be hereinafter fully described; and, finally, finishing the design by engraving or otherwise.

As will be hereinafter understood, my new method of securing the parts comprising the piece of jewelry is applicable to all classes of cluster ornamentation or settings for precious stones; is furthermore applicable to all kinds of metals and is not limited to any particular design or designs, nor to any particular shape or outline.

The invention is illustrated in the accompanying sheet of drawings, in which—

Figure 1 is a side view and Fig. 2 is a top view of a ring made in conformity with the principles of my invention, said ring being of the class known as the marquise ring. Figs. 3, 4 and 5, are detail views of the side pieces of the ring illustrated in said Figs. 1 and 2, and Fig. 6 is a plan or top view of the center piece in which the clusters of precious stones are set. Fig. 7 is a vertical section taken on line  $x x$  in Fig. 2. Figs. 8, 9, 10, 11, 12 and 13 are several views of scarf or stick pins and details of construction thereof, illustrating the adaptability of the present invention to other forms of jewelry.

I will first describe my invention in connection with the manufacture of cluster rings,

as illustrated in Figs. 1 to 7 inclusive.

In carrying out my method, two metal blanks  $a$ , substantially of the shape and form illustrated in Figs. 3 and 4, and which may be made of any suitable metal, are first subjected to the action of a die, the purpose of which is to partially form thereon the design intended to be imparted to the supporting frame of the ring, and by means of the die the blanks are formed or bent, in the case of a marquise ring, crescent-shaped as illustrated in said Fig. 4. Two of these blanks are then placed together, as indicated in Fig. 5, their ends  $a'$  and  $a''$  being secured together by solder. I next take a blank  $b$  and strike it up in the form illustrated in Fig. 6, said blank being provided with the settings for the stones, forming a center piece, as will be evident. This center-piece  $b$  is then placed between the two side pieces  $a$ , in such a manner that the surrounding edge  $b'$  of the center-piece  $b$ , will come flush with the upper edges  $a^3$  of the two side-pieces  $a$ , said parts being soldered together at their abutting edges, as will be understood from an inspection of Fig. 7. The edges of both said side pieces  $a$  and the center-piece  $b$ , soldered together, as stated, are now cut or filed away to form the cramps  $a^4$  on the side-pieces  $a$  and cramps  $b^2$  on the center piece  $b$ , in a desirable ornamentation and for the purpose of holding the precious stones in the surrounding cluster.

The center-piece  $b$  is preferably provided near its marginal rim with a row of holes or perforations  $b^4$ , into which the workman can cut or file, to remove part of the surrounding surface of the center-piece, and this enables him to form the cramps  $b^2$  in a very rapid manner.

The band or ring portion  $c$  is firmly secured to the sides of the pieces  $a$  in the usual manner.

As will be seen from Figs. 8 to 13 inclusive, the principle of my invention is applicable to other forms of jewelry, such as scarf or stick pins, in which but one side piece  $a$  is used in connection with a center piece  $b$  of any suitable configuration in outline.

The parts are formed and secured together



in precisely the same manner as illustrated in connection with the ring shown in said Figs. 1 and 2.

The edges  $b^3$ , of the center piece  $b$ , see Figs. 10 and 13, are placed flush with the edges  $a^5$  of the correspondingly shaped side-pieces  $b$ , see Figs. 9 and 12, and the parts soldered together at their adjoining edges. The cramps are formed in precisely the same manner as has been stated in the above.

It will be understood that this method of making settings for clusters for jewelry is not limited to any particular kind or character of metal and instead of forming the several parts by means of a die and partially forming the design in outline thereon by a die, said parts can be made by hand, if desirable, and the design may be engraved or otherwise formed.

The method is applicable to any shape or form of rings and to any classes of jewelry in general. By my novel method, this class of cluster jewelry is much lighter and the frame-work for the precious stones can be quickly and safely secured together and can be made with considerable less expense to the manufacturer, being a great saving in time and labor.

Having thus described my invention, what I claim is—

1. The method hereinbefore described of producing jewelry, consisting in first, forming a side piece, as  $a$ , with a design in outline thereon; secondly, forming a center piece, as  $b$ , thirdly, soldering said center piece to the side piece, so that the upper surface of the center piece and the upper edge of the side piece are flush, and finally, forming the

cramps on said side piece and said center-piece, all substantially as and for the purposes set forth.

2. The method hereinbefore described of producing jewelry, consisting in first, forming side-pieces, as  $a$  with a design in outline thereon; secondly, shaping said side pieces crescent-shape, thirdly, soldering two of said side-pieces together at their ends, fourthly, forming a center-piece as  $b$ , fifthly, placing said center piece between said soldered side pieces and soldering said center piece to said side pieces, so that the upper surface of the center piece and the upper edge of the side pieces are flush, and finally, forming cramps on said side pieces and said center piece, substantially as and for the purposes set forth.

3. The method hereinbefore described of producing jewelry, consisting in first, forming a side piece, as  $a$ , with a design in outline thereon, secondly, forming a center piece, as  $b$ , and providing said center piece with holes or perforations  $b^4$  near the edge, thirdly, soldering said center-piece to the side piece, so that the upper surface of the center piece and upper edge of the side piece are flush, and finally, filing or cutting away the edges of said center-piece and side-piece into the holes or perforations  $b^4$ , to form holding cramps for the jewels of the piece of jewelry, all substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 24th day of July, 1894.

EMIL SCHILL.

Witnesses:

FREDK. C. FRAENTZEL,  
WM. H. CAMFIELD, Jr.