F. P. GRECO.

MOLD FOR RINGS.

APPLICATION FILED JULY 27, 1910.

984,659.

Patented Feb. 21, 1911.

Fig. 1

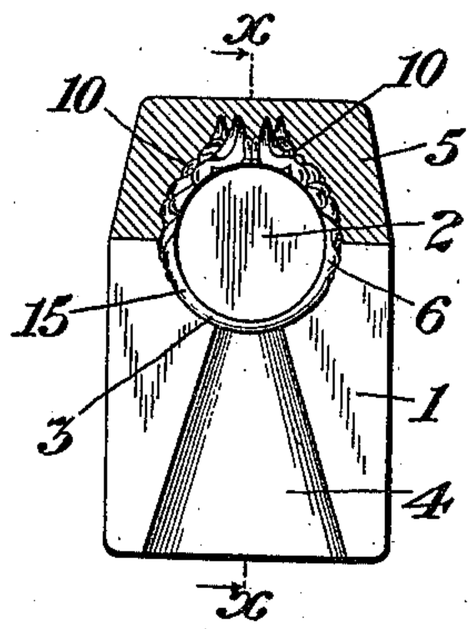


Fig. 2

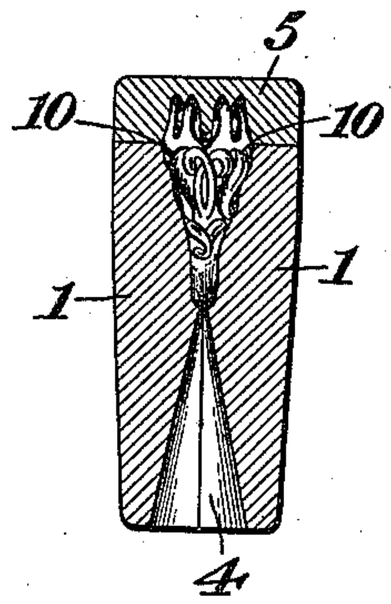
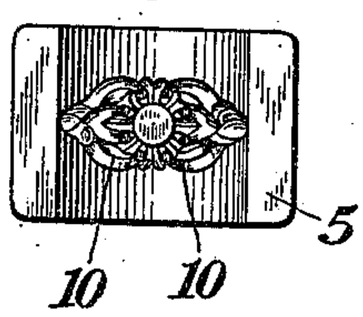


Fig. 3



WITNESSES:

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FRANK PAOLO GRECO, OF NEW YORK, N. Y.

MOLD FOR RINGS.

984,659. Specification of Letters Patent. Patented Feb. 21, 1911.

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To all whom it may concern:

Be it known that I, FRANK PAOLO GRECO, a subject of the Kingdom of Italy, and resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Molds for Rings, of which the following is a specification.

My present invention relates to improvements in the means for molding or casting rings with chasing thereon, said invention consisting of the use of molds, matrices, or other means suitable to mold a ring with chasing in alto-rilievo, basso-rilievo or mezzo-rilievo, which means are of such shape as to permit impressing the pattern into the mold by face pressure.

The novel arrangement of the parts for the above purpose and also the means whereby chased rings may be molded, are shown in the accompanying drawings, in which—

Figure 1 is a vertical cross section of the assembled sections showing a side view of a ring in said mold. Fig. 2 is a vertical section through the line X X, Fig. 1. Fig. 3 is a face view of the top mold.

In Fig. 1 is shown a section 1 made of clay, plaster of Paris, sand, cuttle fish bone or substances of a similar nature. This section has a projection 2 of the same contour as that of the inner surface of the ring to be molded. The groove 3 is formed by side pressure of the plain surface 15 of the pattern ring 6, into the material of the section 1. The gate 4 is formed in section 1, through which the molten metal is poured when the parts are assembled for the purpose of casting.

In Fig. 2, the section 5 and the sections 1, 1, are assembled, showing the gate 4 through which the metal is poured and the position of a ring in said mold.

In Fig. 3 I have shown a suitable section 5, made of clay, plaster of Paris, sand, cuttle fish bones, or substances of a similar nature, wherein is pressed by face pressure the chased surface 10, 10 of the pattern ring 6. This chased surface may be in alto-rilievo, basso-rilievo or mezzo-rilievo. Any form of design may be used in the pattern ring, and I do not limit myself to that shown in the ring 6.

In the embodiment of my invention shown herewith, two sections 1, 1, of approximately the contour of that shown in Figs. 1 and 2, and a section 5 of approximately the contour of that shown in Figs. 1, 2 and 3, are formed. So much of the pattern ring 6 as has chasing thereon is face pressed into the mold 5 of Fig. 3, and the contour of the ring which has not been already face pressed into the section 5, is side pressed into the sections 1, 1, shown in Figs. 1, 2, thereby forming the groove 3. The face pressure of the chased surface 10, 10, of the pattern ring 6 into the section 5 causes the impression of the chasing to be impressed therein. The form of the other part of the ring is side pressed into sections 1, 1. The sections are then assembled, as shown in Fig. 2. The semi-circular projecting surfaces 2 of sections 1, 1, shown in Fig. 1, register with the semi-circular concave surface of the section 5, Fig. 3. The parts so assembled are fastened together by suitable fastening, such as wire or similar means. The molten metal is then poured down the gate 4 until it has completely filled the mold, and the mold is kept in tact until the metal has hardened.

My invention is not limited to the three sections assembled as shown in Fig. 2, but any number of sections may be assembled, though I have found in actual practice that an assembled mold of three sections is the most practical. Should I desire to form a ring that is altogether comprised of chasing I would use two or more sections similar in form to that shown in Fig. 3.

My invention is especially directed toward a curved chased pattern comprising a chasing section concaved to follow the curvature of the ring and two side sections divided in the plane of the ring and having a convexed projection conforming to and fitting said end section. By these means it is possible to secure a ring wherein the chasing on the face thereof as well as its side is sufficiently formed to require but slight work of the engraver to complete the ring, thereby enabling me to save at least three-fourths of the time now necessary to complete a chased ring by the practices now in use.

While I have herein fully shown and described, and have pointed out in the appended claims certain novel features of construction, arrangement and operation which characterize my invention, it will be understood by those skilled in the art that various omissions, substitutions and changes in the forms, proportions, sizes and details

of the device and of its operation may be made without departing from my invention.

It will be understood that when I speak of a chased ring, the same is not limited to that form, but it may be a ring where the pattern has been secured by piercing, puncturing, indenting, or other means.

I claim:

1. A mold for rings having an ornamental chasing extending about a considerable arc of the circumference of said ring, comprising side mold sections having a form corresponding to the entire inner circular surface of said ring and divided in the plane of said ring and having an exterior surface conforming to approximately the semi-circumference of the exterior of said ring, together with a chasing section concaved to follow the curvature of the ring throughout the region of the chasing, said latter section being formed in said concave surface so as to present no reëntry curves or cavities such as would tend to lock the mold to the ring after the latter has been cast therein.

2. A chased ring mold, comprising a chasing section concaved to follow the curvature of the ring, and two side sections divided in the plane of the ring and having a convex projection conforming to and fitting said end section.

3. A semi-circular mold, comprising a chasing section concaved to follow the curvature of the ring, and two side sections divided in the plane of the ring and having a convex projection conforming to and fitting said end section.

Signed at New York, in the county of New York, and State of New York, this 16th day of July, A. D. 1910.

FRANK PAOLO GRECO.

Witnesses:
ELMER C. MILLER,
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