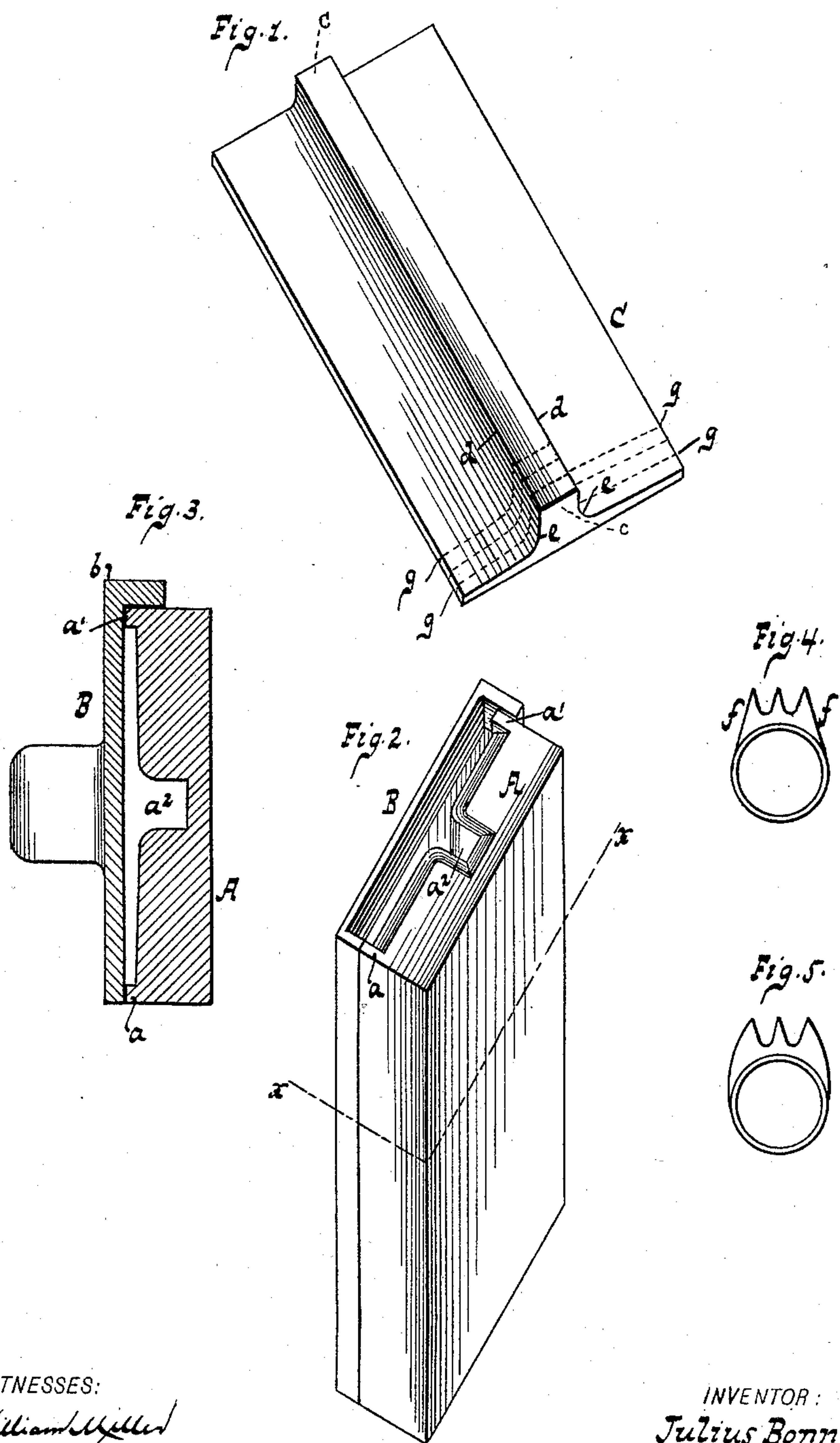


(No Model.)

J. BONNER.
ART OF FORMING BLANKS FOR RINGS.

No. 453,102.

Patented May 26, 1891.



* WITNESSES:

William Miller
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JULIUS BONNER, OF NEW YORK, N. Y.

ART OF FORMING BLANKS FOR RINGS.

SPECIFICATION forming part of Letters Patent No. 453,102, dated May 26, 1891.

Application filed December 11, 1890. Serial No. 374,351. (No model.)

To all whom it may concern:

Be it known that I, JULIUS BONNER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in the Art of Forming Blanks for Rings with Enlarged Tops, of which the following is a specification.

This invention relates to an improvement in the art of forming blanks for rings with raised tops, said improvement being pointed out in the following specification and claim.

In the accompanying drawings, Figure 1 represents a perspective view of the ingot which I prepare in carrying out my invention. Fig. 2 is a perspective view of the mold which serves to cast the ingot. Fig. 3 is a transverse section of the mold in the plane xx , Fig. 2. Fig. 4 is an elevation of a ring made from one of my blanks. Fig. 5 is a similar view of a ring made from one of the blanks prepared by the old process.

The usual process of manufacturing blanks for rings with enlarged tops—such as rings for setting stones—is carried out by first casting an ingot in the form of a flat plate of sufficient thickness for the tops of the rings to be produced. The sides of this plate are then gradually worked down, usually by means of a hammer or by compressing-rollers, leaving a raised rib extending lengthwise through the middle of the plate. This operation requires much time and great skill, and even the most skillful workman is unable to produce a rib with straight or rectilinear sides, and, furthermore, the metal in the sides of the plate is compressed and hardened, so that the subsequent operation of completing the blanks is rendered difficult and the rings formed from such blanks have the form shown in Fig. 5, the sides of the top bulging outward, and unless these bulging sides are corrected by filing away a portion thereof the finished rings have a clumsy appearance. In order to obviate these difficulties, I prepare a mold which consists of two sections A and B. The

section A is provided with two flanges $a a'$, rising from its edges and with a groove a^2 extending throughout its entire length at the middle of its width. The section B bears flat against the edges of the flanges $a a'$, and it is provided with a flange b , which overlaps the flange a' . When the two sections are placed against each other, as shown in Fig. 2, the cavity formed between them is shaped exactly like the ingot C, (see Fig. 1,) the mouth of said cavity being made flaring to facilitate the introduction of the molten metal. By means of this mold I am enabled to produce an ingot with a raised rib c , the sides $d d$ of which are rectilinear from the top downward and join the side blades of the ingot by concave lines $e e$. If one of my ingots is cut into transverse strips or blanks g , as indicated in dotted lines in Fig. 1, and one of these strips is exposed to a proper die, a blank is obtained, which, when properly bent, produces a ring of the form shown in Fig. 4, the sides $f f$ of the raised top being rectilinear and not bulging outward, like those in the ring shown in Fig. 5. By means of my invention, therefore, I am enabled to save much time and labor in the manufacture of said rings.

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

The process of manufacturing blanks for rings with raised tops, which consists in casting an ingot with a raised rib c and flat or tapering sides $d d$, then cutting this ingot transversely into strips into the required width, and finally exposing these strips to the action of dies of the proper shape for forming the blank, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JULIUS BONNER.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.