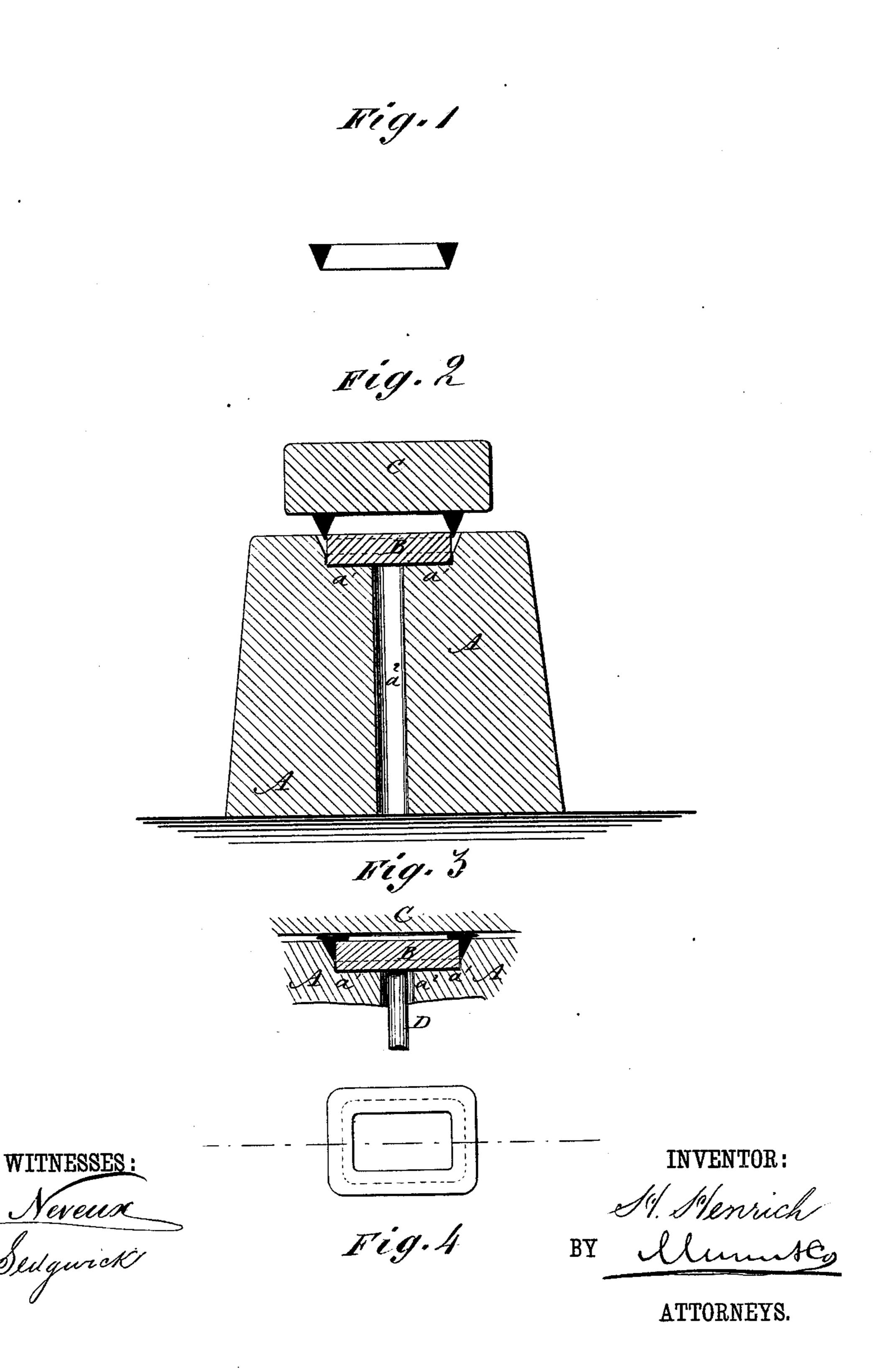
## H. HENRICH.

Dies for Forming Settings for Lockets.

No. 203,040.

Patented April 30, 1878.



## UNITED STATES PATENT OFFICE.

HEINRICH HENRICH, OF NEW YORK, N. Y., ASSIGNOR TO ROSA HENRICH, OF SAME PLACE.

## IMPROVEMENT IN DIES FOR FORMING SETTINGS FOR LOCKETS.

Specification forming part of Letters Patent No. 203,040, dated April 30, 1878; application filed March 19, 1878.

To all whom it may concern:

Be it known that I, Heinrich Henrich, of the city, county, and State of New York, have invented a new and useful Improvement in Dies for Forming Settings for Rings, Lockets, Buttons, &c., of which the following is a specification:

Figure 1 is a section of a blank setting before being placed in the die. Fig. 2 is a vertical section of the die, showing the blank setting in place ready to be operated upon. Fig. 3 is the same view as Fig. 2, but showing the setting formed and ready to be removed from the die. Fig. 4 is a back view of the setting.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish dies for forming settings for rings, lockets, buttons, and other articles of jewelry, the use of which will enable the settings to be formed in much less time, with much less labor, and with much less waste of material than when they are formed in the ordinary way, and at the same time will produce settings with perfectly square shoulders and with accurately beveled outer sides.

The invention consists in the combination of dies of a novel construction for accomplishing the above stated results, the construction of which dies will be hereinafter more fully described.

A is the die, which may be of any convenient shape and size. The face of the die A is made perfectly smooth and flat, and in it is formed a cavity,  $a^1$ , of the shape and size of the settings to be formed. The upper part of the sides of the cavity  $a^1$  are beveled to exactly the inclination that the outer sides of the setting is to have. B is a block, which is fitted accurately into the lower part of the cavity  $a^1$ , and is made of such a thickness that its upper surface may be flush with the upper surface of the die A. In this way a wedge-shaped groove or recess is left between the sides of the block B and the beveled upper

part of the sides of the cavity  $a^1$  of the die A of exactly the shape and size of the upper

part or shoulder of the setting.

The blank for the setting is formed by drawing a wire into a V or knife-edge form through a gage, cutting it into pieces of the required length, soldering the ends of the pieces together, and hammering the rings thus formed into the required shape upon a mandrel. The blank is then placed with its edge in the groove between the edges of the block B and the beveled edges of the cavity  $a^1$  of the die A, and the block C is laid upon it, as shown in Fig. 1.

The block C is made with a smooth level face, and may be of any convenient shape and size. The block C is then struck with a drophammer, which forces the edge of the blank into the groove, and spreads the base of the blank inward over the top of the block B, forming the setting, with square-shouldered seat for the stone, and with its outer side of the desired bevel. The burr around the outer edge of the base of the setting is then cut off. Settings formed in this way require no filing to bring them to the proper shape, so that there is no waste of material, and at the same time they are more accurate and regular than when made by hand. The block B and the setting are removed from the cavity  $a^1$  of the die A by a rod, D, inserted through a hole, a2, formed through the said die A for this purpose, and the setting is then slipped off the said block B.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the die A, having a cavity,  $a^1$ , made with a beveled edge, formed in its face, the block B inserted into said cavity, and the top die or stamp C, substantially as and for the purpose set forth.

HEINRICH HENRICH.

Witnesses:

JAMES T. GRAHAM, C. SEDGWICK.