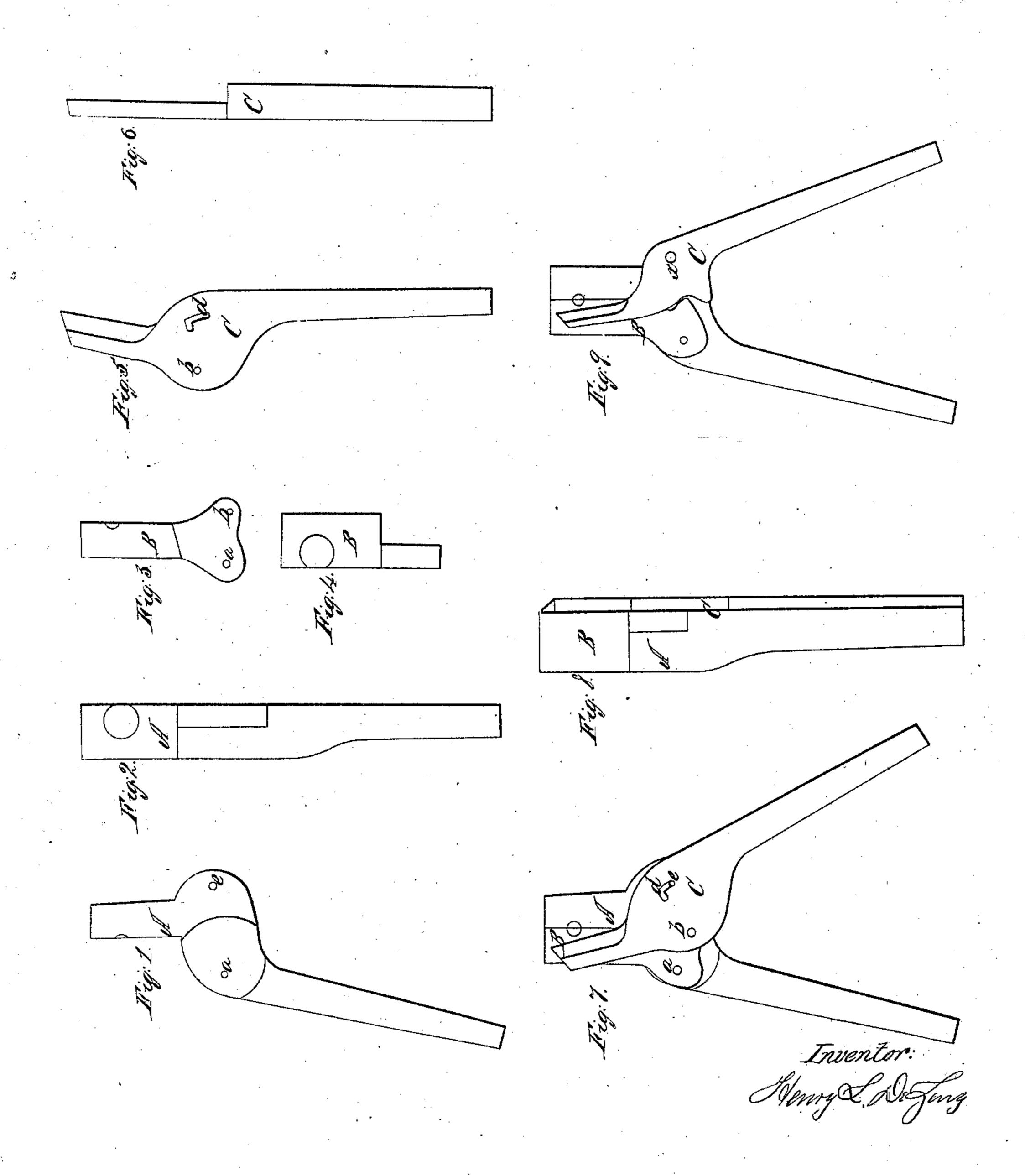
## H. L. De Zeng Bullet Mold. Patented Mar. 31, 1857.

Nº 910.



## UNITED STATES PATENT OFFICE.

HENRY L. DE ZENG, OF GENEVA, NEW YORK.

## BULLET-MOLD.

Specification of Letters Patent No. 16,910, dated March 31, 1857.

To all whom it may concern:

Be it known that I, Henry L. De Zeng, of Geneva, in the county of Ontario and State of New York, have invented a new and useful Bullet-Mold; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

A, Figure 1, represents the principal jaw with its handle, cast or wrought in one piece, the upper surface of the handle being flush with that of the jaw. In this handle and near where it joins the jaw is a countersink equal in depth to about one half the thickness of the handle (see Figs. 1 and 2) for a purpose described hereafter.

B, Fig. 3, represents a cam jaw made to match the jaw A—the cam being placed in the countersink and held by a rivet a. This jaw, B, is cut away under the cam so that its upper surface shall be flush with that of the jaw, A—as represented (see Figs. 4 25 and 8).

C, Fig. 5, represents a cutting bar performing the double part of handle and knife, and is attached to the point of the cam (on its upper surface) by a rivet, b, (see Figs. 30 3 and 7). The blade of this cutting bar, C, is made thin (see Fig. 6) so that when it is in its proper position its handle shall be nearly on the same line with that of the jaw, A, (see Fig. 8), and has a small slot, d, 35 cut through it in the edge opposite to (or nearly so) the rivet, b, for a purpose described hereafter (see Figs. 5 and 7).

In the jaws, A and B, (one half in each) is drilled or cherried the mold for the lead and is made close to the upper surface of the jaws so that there shall be no neck to the bullet as represented in (Figs. 2 and 4).

The principal characteristics of my invention are as follows: When the parts are all in their proper positions as represented by Fig. 7, a small pin, e, is passed through the slot, d, (in the bar, C,) into the handle of the jaw, A, for this purpose. When it is

desired to close the mold the handles are forced apart, the cutting bar, C, turning on 50 the rivet, b, (which connects it to the cam jaw B) until the end of the slot, d, strikes the pin, e, above mentioned. This will cause the point of the cam to be forced downward and the jaw, B, to press against the 55 jaw, A—as represented by Fig. 7—the blade of the cutting bar being on one side of the opening in the mold. In this position the mold is to be filled, when by drawing the handles toward each other the blade of the 60 cutting bar, C, will strike against the surplus lead on the surface of the mold. This will cause a strain upon the rivet, b, which will prevent the jaw, B, opening until the blade has passed over the opening in the 65 mold and removed the lead. The slot, d, allowing sufficient play for that purpose. slot, d, will strike the pin, e, forcing up the end of the cam until the jaw, B, is sepa- 70 rated from, A, so that the bullet can be made to drop out. It is evident by Fig. 9, that the same movement of the cam-jaw, B, can be produced by the cutting-bar, C, being made fast at, x, and the necessary play given 75 by the point of the cam fitting into a notch in the edge of the cutting bar. But in this case the jaw would not be locked during the cutting movement of the bar.

What I claim and desire to secure by Let- 80 ters Patent is—

The movable cam-jaw, B, in combination with the cutting-bar, C, constructed and operating substantially as specified, whereby the movable jaw is held to the stationary 85 jaw while the bullet is being cast, by forcing the handles apart, and on pressing the handles together the projection from the bullet is first cut off and then the movable jaw is thrown back to discharge the bullet substan-90 tially as specified.

## HENRY L. DE ZENG.

In presence of— C. A. Seward, I. W. Griswold.