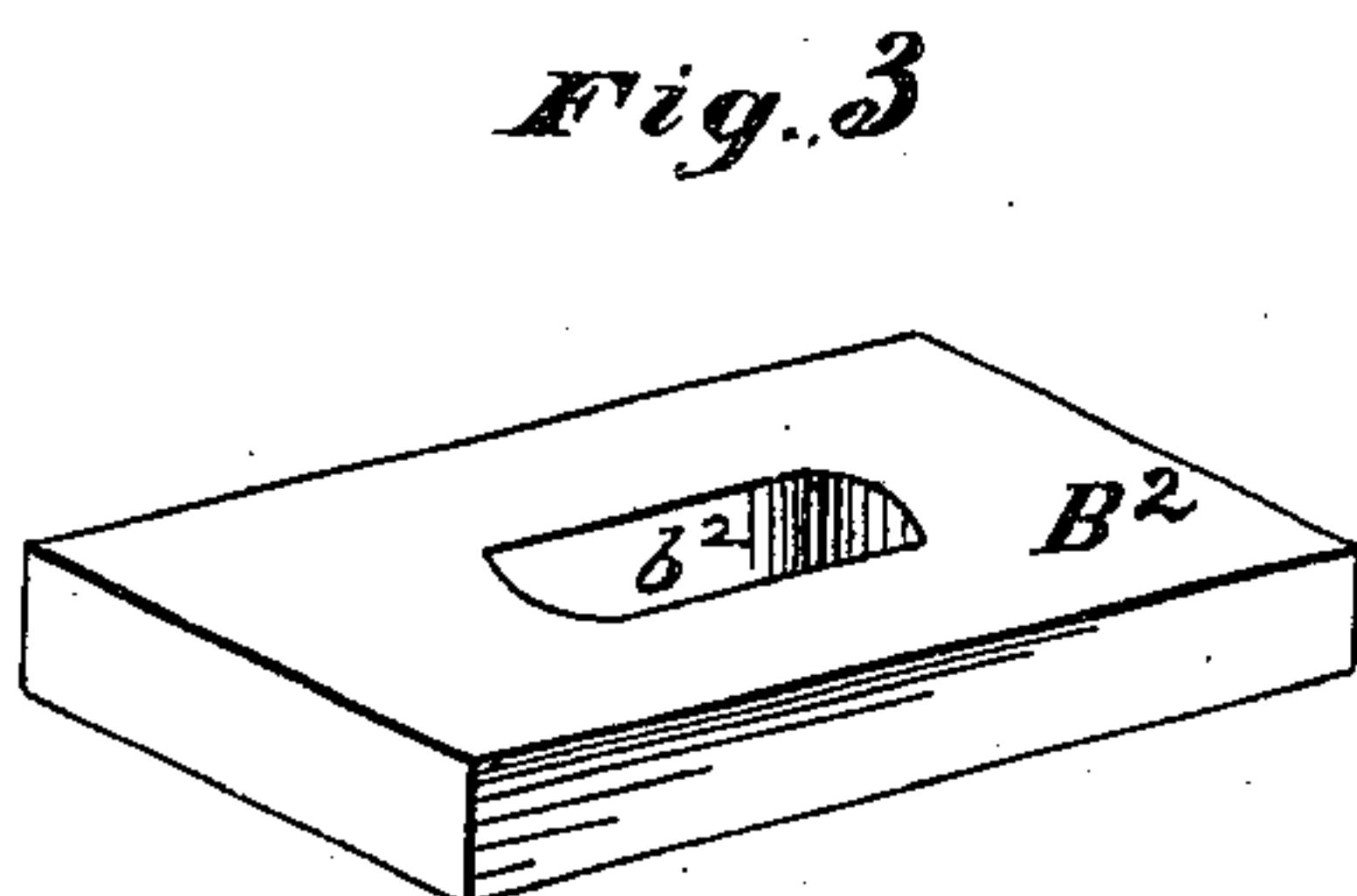
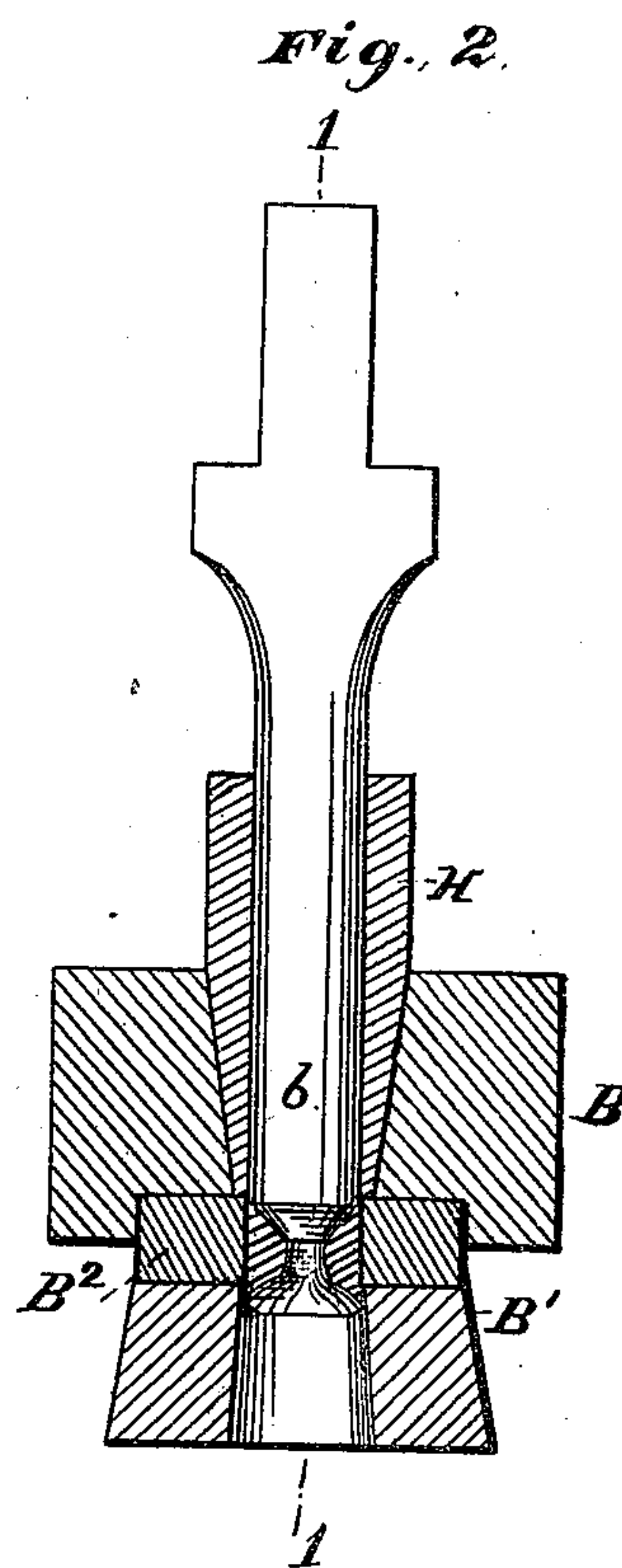
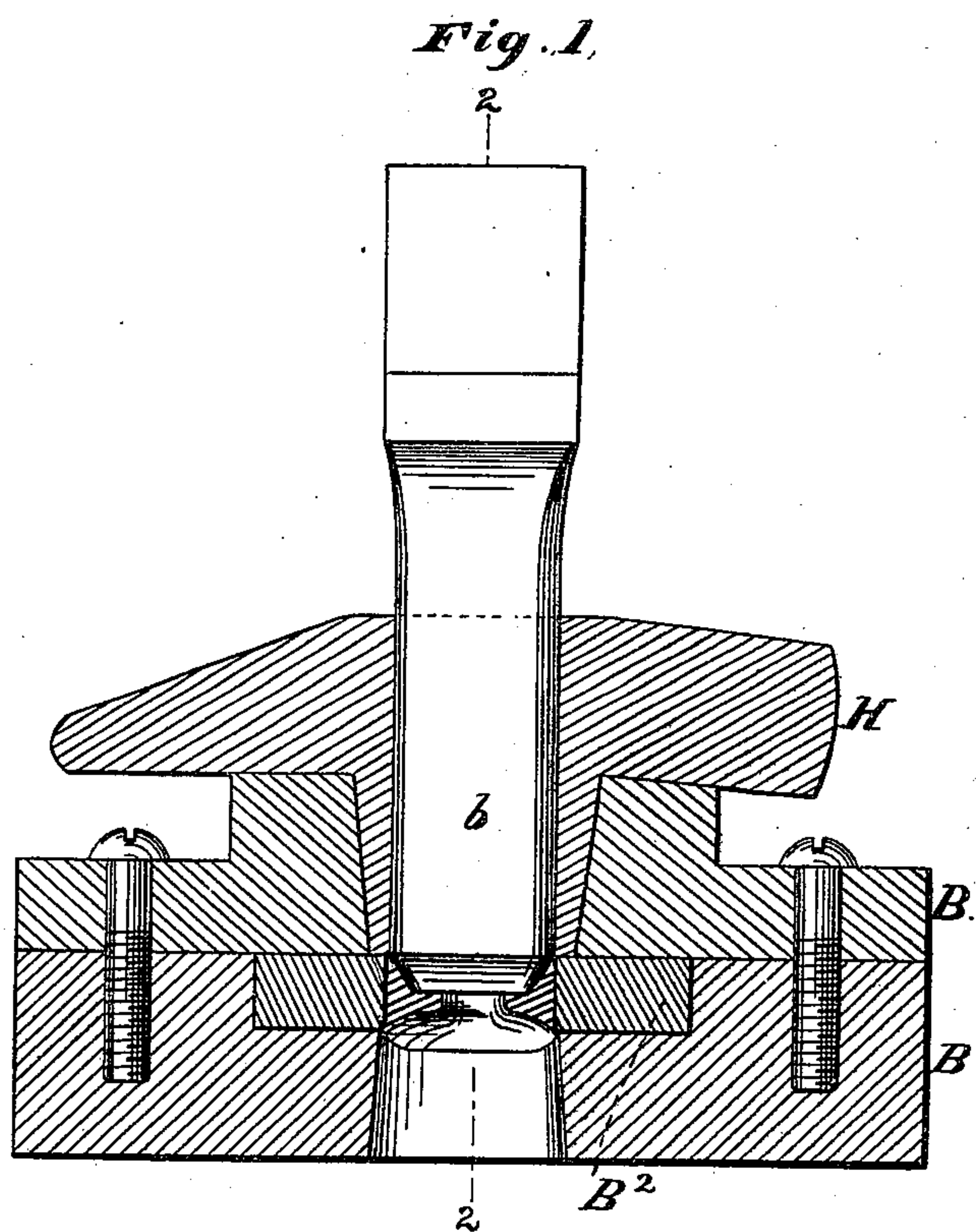


D. MAYDOLE.  
Die for Forging Adze-Eye Tools.

No. 196,917.

Patented Nov. 6, 1877.



Witnesses

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# UNITED STATES PATENT OFFICE.

DAVID MAYDOLE, OF NORWICH, NEW YORK.

## IMPROVEMENT IN DIES FOR FORGING ADZ-EYE TOOLS.

Specification forming part of Letters Patent No. **196,917**, dated November 6, 1877; application filed July 27, 1877.

### *To all whom it may concern:*

Be it known that I, DAVID MAYDOLE, of Norwich, in the county of Chenango and State of New York, have invented a certain new and useful Improvement in Dies for Forging Adz-Eye Tools, of which the following is a specification:

My invention relates to dies for forging adz-eye hammers, picks, hatchets, and other tools, and especially to dies employed for the purpose of drawing down and finishing the adz-eye.

The invention particularly consists in an improvement on the dies for this purpose described and claimed in Letters Patent No. 186,588, granted to me on the 23d of January, 1877, in which I show a die made in two parts—to wit, a cutting base and a forming upper part. In my present improvement I construct the said cutting base with a separable cutting-plate, adapted to be reversed, repaired, or replaced, as hereinafter described.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of the improved die on the line 1 1, Fig. 2. Fig. 2 is a vertical transverse section of the same on the line 2 2, Fig. 1, the punch and a hammer-blank being shown in each case. Fig. 3 is a perspective view of the separable cutting-die plate.

B B<sup>1</sup> are, respectively, the upper and base portions of a matrix or female die employed for imparting the shape to the adz-eye of the hammer-blank A while the same is drawn down by the action of the punch *b*, as described in my Patent No. 186,588, above referred to.

B<sup>2</sup> is a separable plate, of hardened steel, constituting the central part of the upper face of the base or cutting die B<sup>1</sup>, and having in its center an aperture, *b*<sup>2</sup>, to permit the passage of the punchings, its angular margin acting in connection with the punch *b*<sup>1</sup>, to sever the surplus metal from the extremity and interior of the adz-eye.

I have shown my invention in its application to the formation of adz-eye hammers for the purpose of illustration; but it will be manifest that the improvement is equally applicable to the production of picks, hatchets, and other adz-eye tools.

By constructing the base-die as now described, it will be seen that the separable plate B<sup>2</sup> stands nearly all the wear, and that it is easily reversed, removed, or replaced. When its upper face becomes worn it is simply reversed in the base-die, and thus presents a new face. When both faces are worn it is re-forged with trifling labor, and forms a new die-plate of less thickness or with a larger aperture, as circumstances may require, so that it can be transferred from one die to another, for the production of tools of different sizes, until it is completely used up.

The hole through the plate B<sup>2</sup> is to be of the same size throughout, so that the plate can be used either side up, at will. This enables double wear to be had from each plate. Then the hole can be slightly enlarged and a larger size of work done with the plate, and so on until the plate is entirely used up.

Having thus described my invention, the following is what I claim as new and desire to secure by Letters Patent:

The die for drawing down the eyes of hammers, hatchets, picks, and other adz-eye tools, consisting of the base B<sup>1</sup>, the separable forming upper part B, secured thereon, and the separable and reversible cutting-plate B<sup>2</sup>, applied between the parts B B<sup>1</sup>, as and for the purposes set forth.

DAVID MAYDOLE.

Witnesses:

CYRUS B. MARTIN,  
CHARLES L. FERRY.