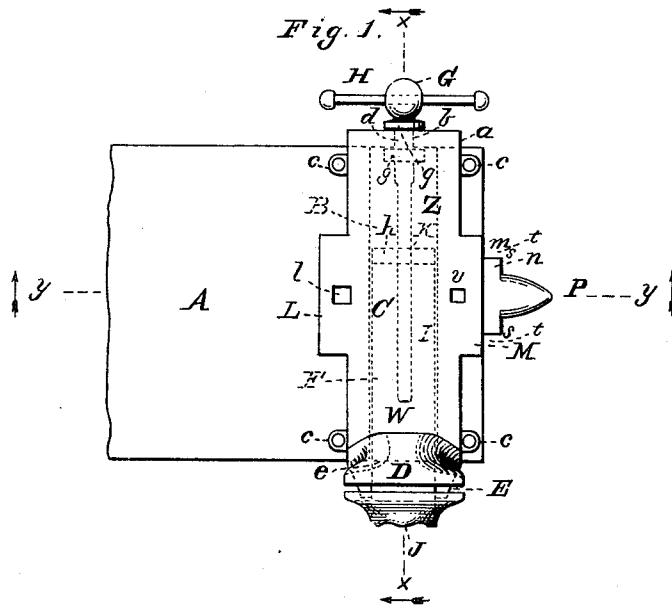
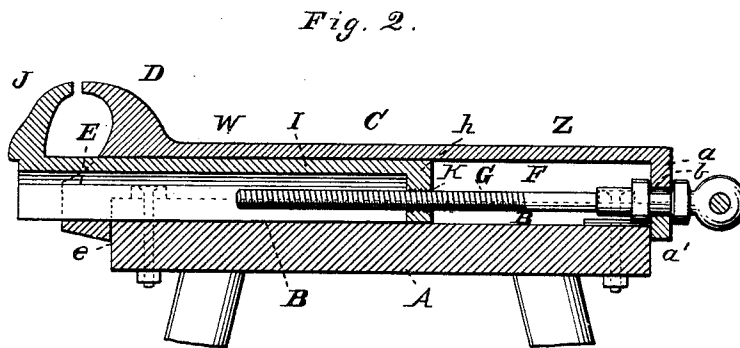
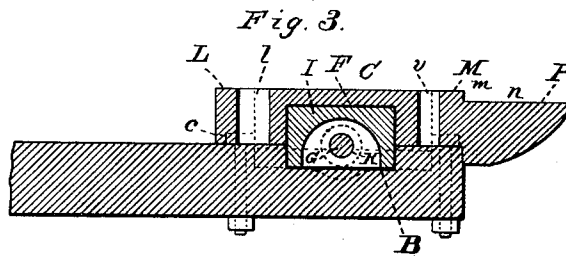


H. H. BRANDES.
COMBINED ANVIL AND VISE.

Patented June 25, 1889.



Villette Anderson,
Mary Traphin

Henry H. Brandes
BY
E. W. Anderson
his ATTORNEY

UNITED STATES PATENT OFFICE.

HENRY H. BRANDES, OF CORYDON, KENTUCKY.

COMBINED ANVIL AND VISE.

SPECIFICATION forming part of Letters Patent No. 405,982, dated June 25, 1889.

Application filed March 16, 1889. Serial No. 303,515. (No model.)

To all whom it may concern.

Be it known that I, HENRY H. BRANDES, a citizen of the United States, and a resident of Corydon, in the county of Henderson and State of Kentucky, have invented certain new and useful Improvements in Bench Vises and Anvils Combined; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a top view. Fig. 2 is a section taken where the broken line *xx* is shown on Fig. 1. Fig. 3 is a section taken where the broken line *yy* is shown on Fig. 1.

The object of this invention is to provide a convenient bench vise and anvil; and it consists in the novel construction and combination of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates the bench, and B a transverse recess in the top thereof adapted to receive the lower edges of the slide portion of the movable jaw J of the vise.

C represents the main anvil casting or plate, having at its outer end the fixed jaw D, rising from the front wing W and extending outward and upward over the loop-offset E, which projects downward, forming a shoulder at *e*, which bears against the edge of the bench when the casting is in position thereon. At the sides of the casting project horizontally the perforated fastening-lugs *c c*. The under side of the casting is hollowed to provide a longitudinal slideway F, extending from the loop-offset E to the rear end wall *a*, which is recessed at *b* to provide a bearing for the journal *d* of the screw G, collars *g g* being provided at the ends of said journal, as shown.

H is the handle of the screw, and I is the rectangular slide, moving in the way F and extending through the loop-offset E. This slide carries the movable jaw J of the vise, and its rear end bar *h* is provided with a

threaded perforation K, which engages the screw G.

The top of the casting is plain, and its middle portion, being between the front wing W and the rear wing Z, is strengthened on each side by the anvil-offsets L and M. The inner offset L projects toward the middle of the bench and is provided with the square aperture *l*. The outer offset M, opposite to said inner offset, projects toward and over the end of the bench, and consists of the angular shoulder *m*, and beyond these is a secondary offset *n*, having angular shoulders *s*, and extending from said secondary offset is the anvil-point P. Between the outer angular shoulders *m* and the inner angular shoulders *s* are the rectangular re-entrants *t*, and at *v* is a squared perforation of smaller size than the squared aperture *l*.

This anvil and vise rests very close to the surface of the bench, and is therefore very secure, its ends being shouldered, as indicated at *a'* and *e*, to bear against the edges of the bench.

In operating the vise the movable jaw, placed outside the fixed jaw, is drawn toward the same by means of the screw. The secondary offset *n* of the casting extends downward below the general plane of its bottom surface and serves to engage the end of the bench, so that the casting has three offsets bearing on the edges of the bench, to which it is secured by screws or bolts through the lugs *c*.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The anvil-casting having the middle anvil-offsets L and M, the fixed jaw D at its end, and below the same the loop-offset E, and the slideway, in combination with the movable jaw J, its slide, and the operating-screw, substantially as specified.

2. The anvil-casting having the middle anvil-offsets L and M, the wings W and Z in front and rear thereof, the fixed jaw D at the end of the front wing, and the front offset E, the rear offset *a*, and the middle offset *n*, respectively adapted to engage the front, rear, and end of the bench, substantially as specified.

3. The combination, with the main anvil-
plate having the slideway in its under sur-
face, the lateral offsets at its middle portion,
the end offset, and the fixed jaw, of the mov-
5 able jaw beyond the fixed jaw, its slide and
operating-screw, and the recessed bench, sub-
stantially as specified.

In testimony whereof I affix my signature in
presence of two witnesses.

HENRY H. BRANDES.

Witnesses:

H. H. KING,
I. C. HOLBERT.