

T. L. GROVER.
Device for Forging File-Blanks.

No. 162,378.

Patented April 20, 1875.

Fig. 1.

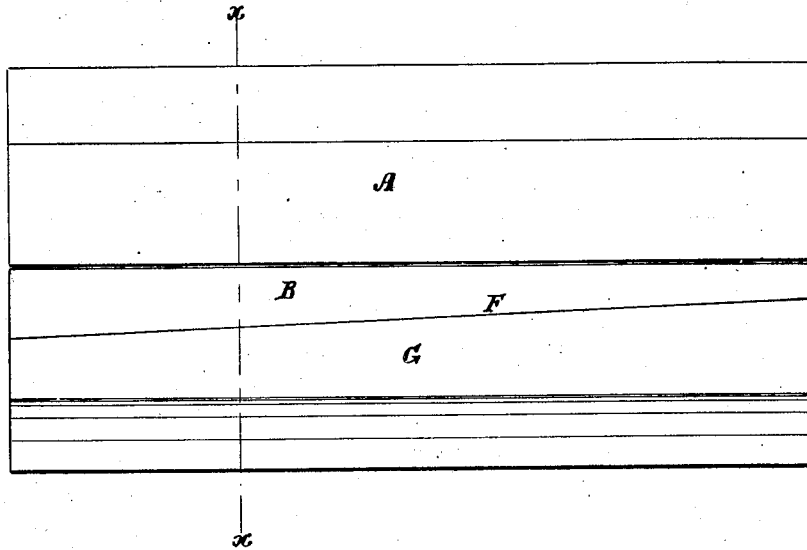
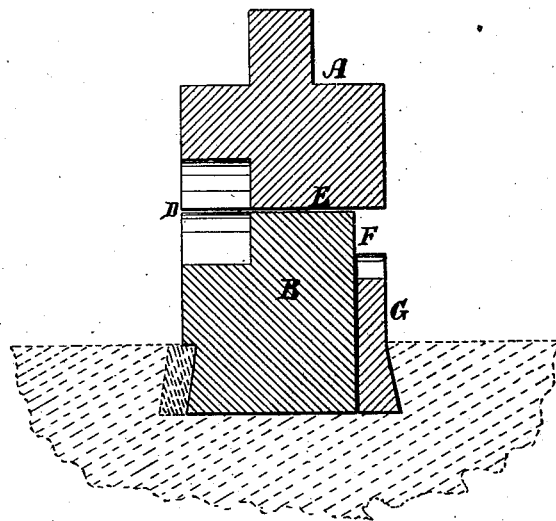


Fig. 2.



WITNESSES:

A. Benneken
A. J. Terry

INVENTOR:

Theo. L. Grover
BY *Wm. H. [Signature]*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THEODORE L. GROVER, OF BROOKLYN, E. D., NEW YORK, ASSIGNOR TO
BERTRAND CLOVER, OF NEW YORK CITY.

IMPROVEMENT IN DEVICES FOR FORGING FILE-BLANKS.

Specification forming part of Letters Patent No. **162,378**, dated April 20, 1875; application filed
October 10, 1871.

To all whom it may concern:

Be it known that I, THEODORE L. GROVER, of Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and Improved Die for Forging File-Blanks, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is a side elevation of a pair of dies contrived according to my invention, and Fig. 2 a transverse section taken on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A and B represent the dies, A being the movable one attached to the hammer-stock, and B being the stationary one attached to the anvil. The reduced or contracted parts D of the face of the dies are for drawing the bars down to form the blanks, and the parts E are for smoothing and finishing the wide sides, and F is the recess in the upper corner of the stationary die, in which to taper or otherwise shape edges or narrow sides or the tang. Now,

I propose to produce this recess by the application of the detachable piece G to the side of the die, making the upper edge inclined to the face of the die for taper shapes and parallel for parallel shapes, and using different interchangeable forms and sizes for blanks of different forms and sizes. These detachable pieces will be secured by wedging in the anvil, together with the bed-die, as shown in the drawing, or in any other approved way. Part of the recess may, of course, be formed in the upper die by fitting a detachable piece on it; but as it answers just as well to make it all in one die, I prefer to do so.

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

The dies A B, provided with drawing-faces D D, smoothing-faces E E, and tapering recess F, as and for the purpose specified.

THEODORE L. GROVER.

Witnesses:

ERWIN D. BUCKMAN,
JOHN P. CONKLIN.