

(No Model.)

J. ZURBRICK.
DEVICE FOR SHARPENING CALKS.

No. 407,458.

Patented July 23, 1889.

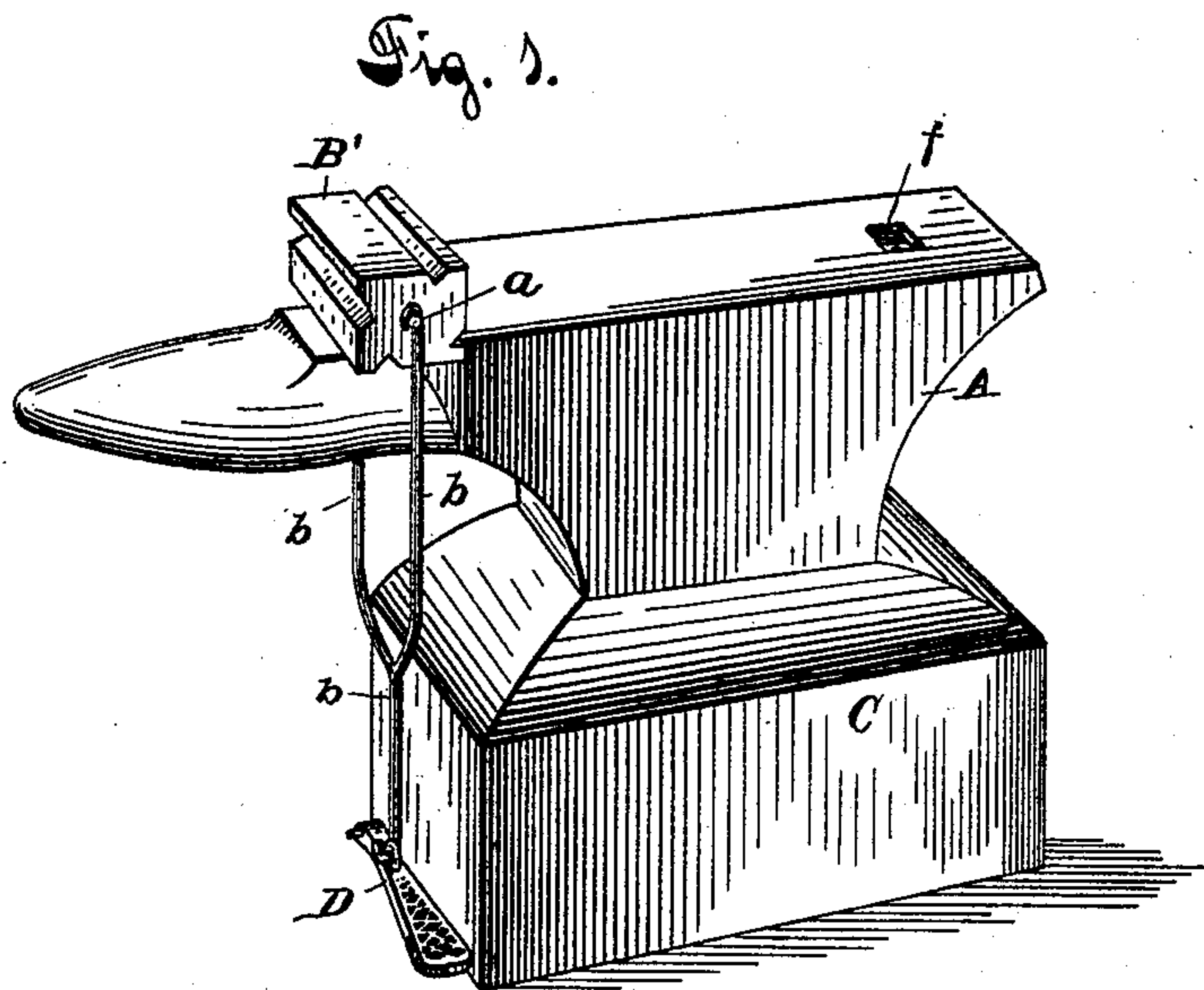
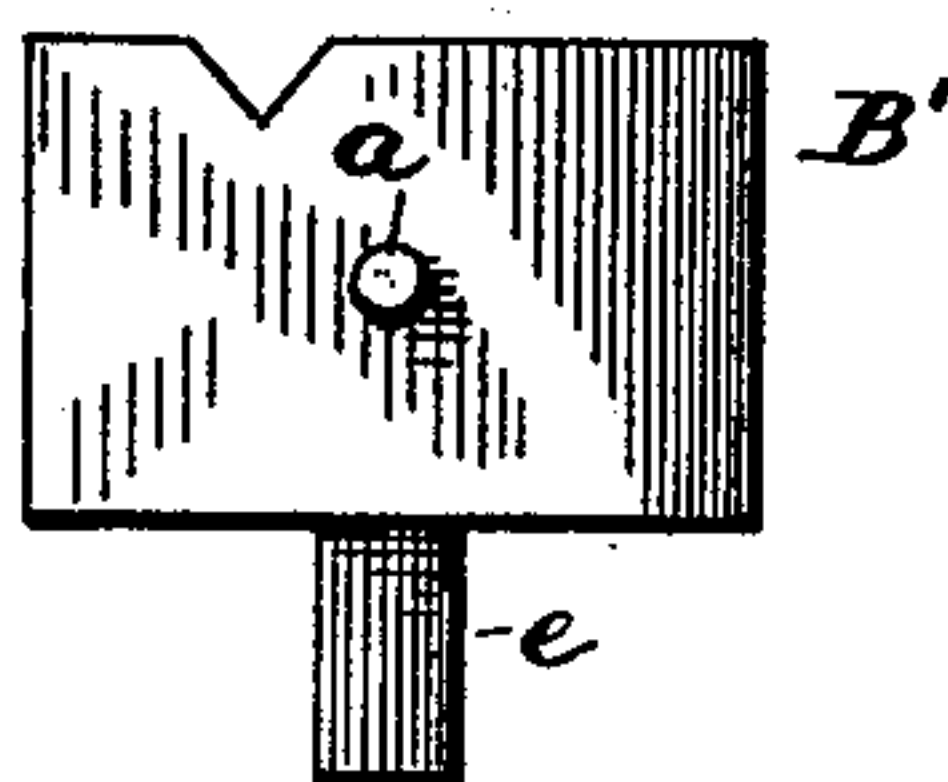


Fig. 2.



WITNESSES

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DEVICE FOR SHARPENING CALKS.

SPECIFICATION forming part of Letters Patent No. 407,458, dated July 23, 1889.

Application filed May 7, 1888. Renewed January 18, 1889. Serial No. 296,790. (No model.)

To all whom it may concern:

Be it known that I, JOHN ZURBRICK, a citizen of the United States, residing at Cheektowaga, in the county of Erie and State of New York, have invented certain new and useful Improvements in Welding Toe-Calks to Horseshoes; 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 the letters and figures of reference marked thereon, which form a part of this specification.

The object of this invention is to sharpen the toe-calks of horseshoes before they are put onto the shoe and weld each one on after it is sharp, thereby saving a great deal in time—say one-third—that it takes by the usual method, which is to weld on the toe-calk in a blunt state and then sharpen it afterward; and the invention consists in a steel die that sets on the square part of the horn of the anvil or in the square hole in the top of the anvil. This die has one, two, or more V-shaped slots, which may be of different depths or sizes to suit the different-sized shoes or calks, all as hereinafter fully explained.

In the drawings, Figure 1 is a perspective of an anvil having my device in connection therewith; Fig. 2, an end elevation of the die having only a single slot and with a shank to set in the anvil-hole.

A represents the anvil, and C the anvil-block.

B is a rectangular steel die having a V-shaped slot therein sufficiently deep to set in the sharp toe-calk of a horseshoe. This slot usually extends along the whole face of the die and is nearer one side than the other, as shown, for strength.

In Fig. 1 the die has a V-shaped slot on every face, so that if one becomes worn another is ready, and may be of different depths to suit larger or smaller calks.

a represents trunnions on the ends of the

die B, around which are hung or hooked rods *b b*, which extend down to and are hooked into a treadle D, attached to the front end of the anvil-block C, and on which the blacksmith puts his foot to hold the die in place on the anvil-horn while he is working it, and also to revolve the die to present a different slot when required.

Fig. 2 shows a die B', having but one slot, and instead of setting on the horn has a square projecting shank on the under side that fits into the square hole *f* of the anvil. It is merely a change in position from the horn to the rear, so that two dies can be worked at once, if necessary. These V-slots may be curved a little to accommodate a curved calk.

The operation is as follows: The calk is first sharpened; then the horseshoe is heated, and then the toe-calk fastened to the shoe the same as any toe-calk. Then a welding heat is got at the toe part of the shoe, then brought to the anvil, the calk set in the V-slot of the die, and then by striking on the under side of the shoe the calk is welded solid to the shoe. The sharp part setting into the slot is not blunted.

I claim—

1. In a device for sharpening horseshoe toe-calks, the die B, having four flat sides and each side having a V-shaped slot therein, and each slot nearer one side than the other on each face, substantially as shown and set forth.

2. In combination with an anvil, the die B, having the V-shaped slots therein and adapted to revolve on the anvil-horn by means of the trunnions *a*, formed on the ends of the die, the rods *b b*, the lower end or ends of which are fastened to a treadle D, attached to the anvil-block, all substantially as and for the purpose specified.

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

JOHN ZURBRICK.

Witnesses:

J. R. DRAKE,

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