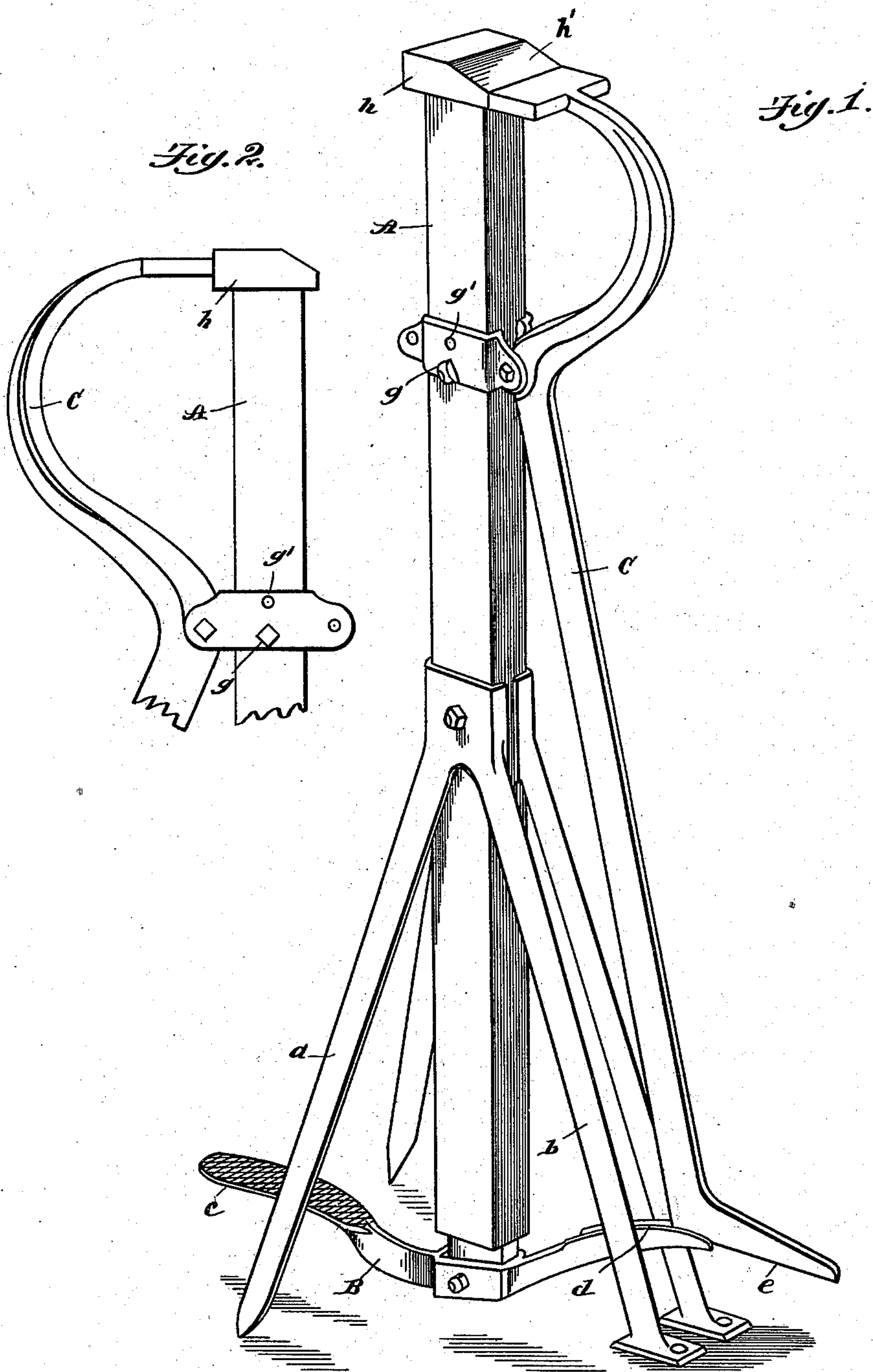


(No Model.)

H. J. BOYCE.  
BLACKSMITH'S VISE.

No. 558,927.

Patented Apr. 28, 1896.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

HERBERT J. BOYCE, OF FAYETTE, OHIO.

## BLACKSMITH'S VISE.

SPECIFICATION forming part of Letters Patent No. 558,927, dated April 28, 1896.

Application filed December 12, 1894. Serial No. 531,577. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT J. BOYCE, a citizen of the United States, residing at Fayette, county of Fulton, State of Ohio, have invented a certain new and useful Improvement in Blacksmiths' Vises; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to blacksmiths' vises, and has for its object an improved form of light movable vise in which there is great stability of the anvil part, quick action of the clamping-jaw, a firm grip between the jaws, light weight of the machine, and in which the main or anvil jaw is fitted with two faces and is reversible, so that either of the faces can be arranged to engage with the movable jaw, and in which the main or anvil jaw is also adjustable vertically with respect to the clamping-jaw.

In the drawings, Figure 1 shows the vise in perspective. Fig. 2 is an elevation of the two jaws, showing the main jaw in its position reverse to that shown in Fig. 1.

A indicates the main jaw or anvil-jaw, which is preferably made of a square bar of steel or iron and is supported by four standards made in pairs, each pair consisting of a pointed leg *a* and a flat-footed leg *b*, which unite at their upper ends and are provided at the junction with a tubular engaging-plate, perforated for a bolt-hole and adapted to engage with the standard A and hold the same securely. The two pairs of standards form the support for the standard A. The forward legs, which are the pointed ones, spread somewhat more at their extreme lower ends than do the rear legs, which extend back and downward nearly parallel to one another. On the lower end of the standard A is hung a foot-lever B, one end of which is provided with a pedal *c* and the other end of which is provided with a cam that wipes the foot of the movable jaw C and forces

the foot outward and the upper end inward, the cam-surface *d* of the treadle-lever and the foot-surface *e* of the movable jaw being provided with any suitable contour to produce the quick primary closing and a strong grip at the end of the closing motion of the jaws.

At the summit of the anvil is a head *h*, one side of which is provided with a beveled or scarfed-off face *h'* and the other meets the vertical side of the anvil-head at a right angle, or substantially right angle. Through the standard of the anvil A is a bolt-hole, and at the place where this bolt-hole is is a ring provided with ears on one side, through which the pivotal bolt of the movable jaw C engages. The ring is traversed by two bolt-holes *g* and *g'*, and through one of these bolt-holes is a bolt that passes through a corresponding hole in the standard A. By changing the bolt shown in the drawings, as in the lower hole *g* to the upper hole *g'*, the relative height of the standard A and the jaw C is changed, and the scarfed face *h'* is higher than the upper surface of the movable jaw C. This permits of the use of the vise for turning or forming the sharp calk of a shoe on which there is opposed to the sharp calk a clip, a form of shoe that is in very common use and which is difficult to form on the ordinary vise.

For use in other shoes in which the clip is not employed the anvil may be adjusted as shown in the drawings, with the scarfed-off face terminating at its lower edge at the upper plane of the movable jaw C. In forming the blunt calk on horseshoes that are used for summer wear and on dirt roads the anvil is reversed and the right-angled corner presented toward the movable jaw.

What I claim is—

1. In a blacksmith's vise, the combination of an anvil suitably supported and reversible with respect to the jaw, a swinging jaw vertically adjustable with respect to the head of the anvil, and means for actuating the swinging jaw, substantially as described.

2. In a blacksmith's vise, the combination of an anvil mounted on legs and reversible

thereon, a swinging jaw vertically adjustable and adapted to engage with said anvil, substantially as described.

3. In a blacksmith's vise, the combination  
5 of a movable jaw, an anvil provided with a scarfed-off face, and a horizontal face adapted to be reversed and means whereby said anvil may be reversed so as to bring either of said

faces in engagement with the movable jaw, substantially as described. 10

In testimony whereof I sign this specification in the presence of two witnesses.

HERBERT J. BOYCE.

Witnesses:

C. F. BURTON,  
F. CLOUGH.