

(No Model.)

P. A. GLADWIN.

WISE.

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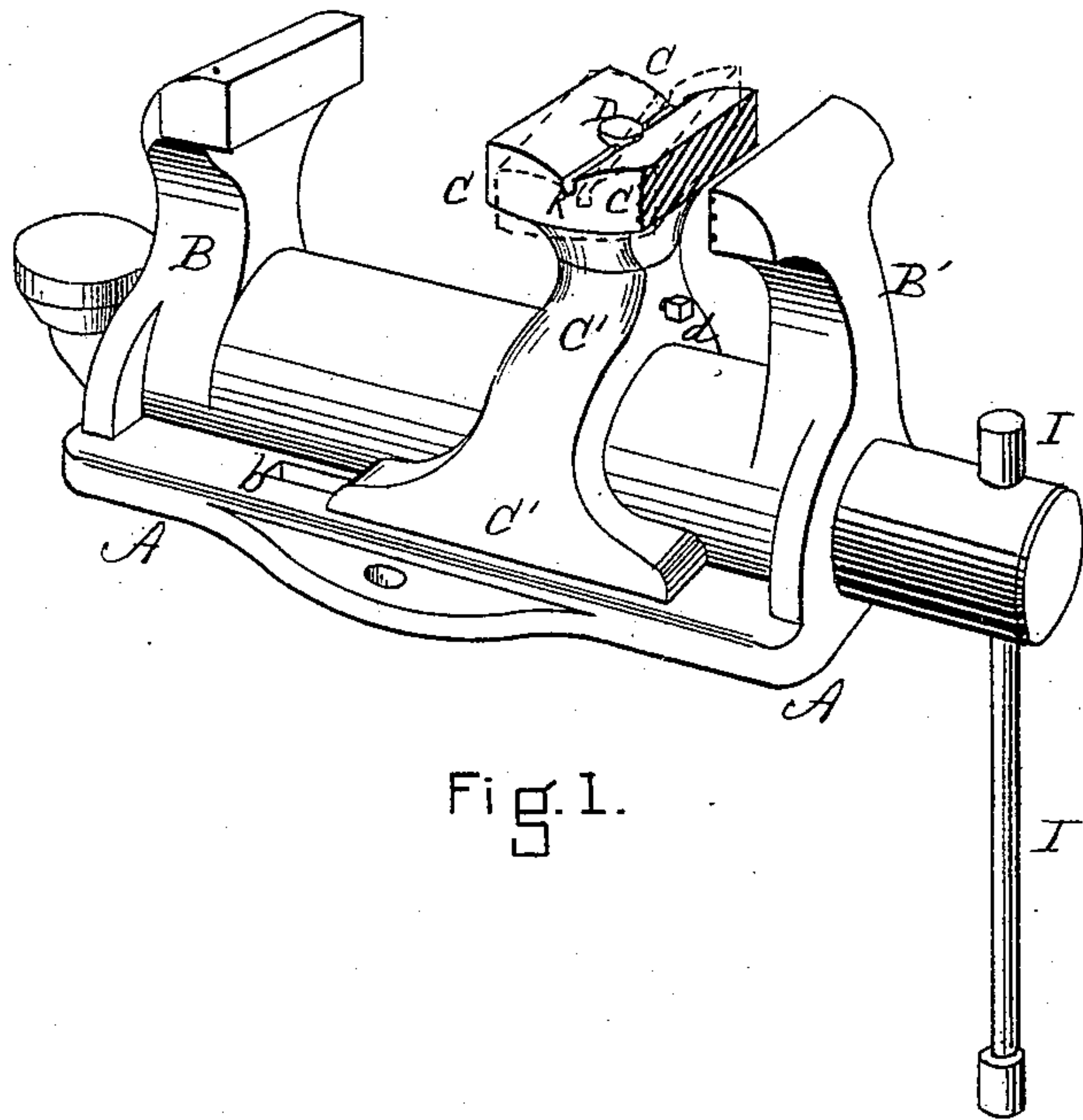


Fig. 1.

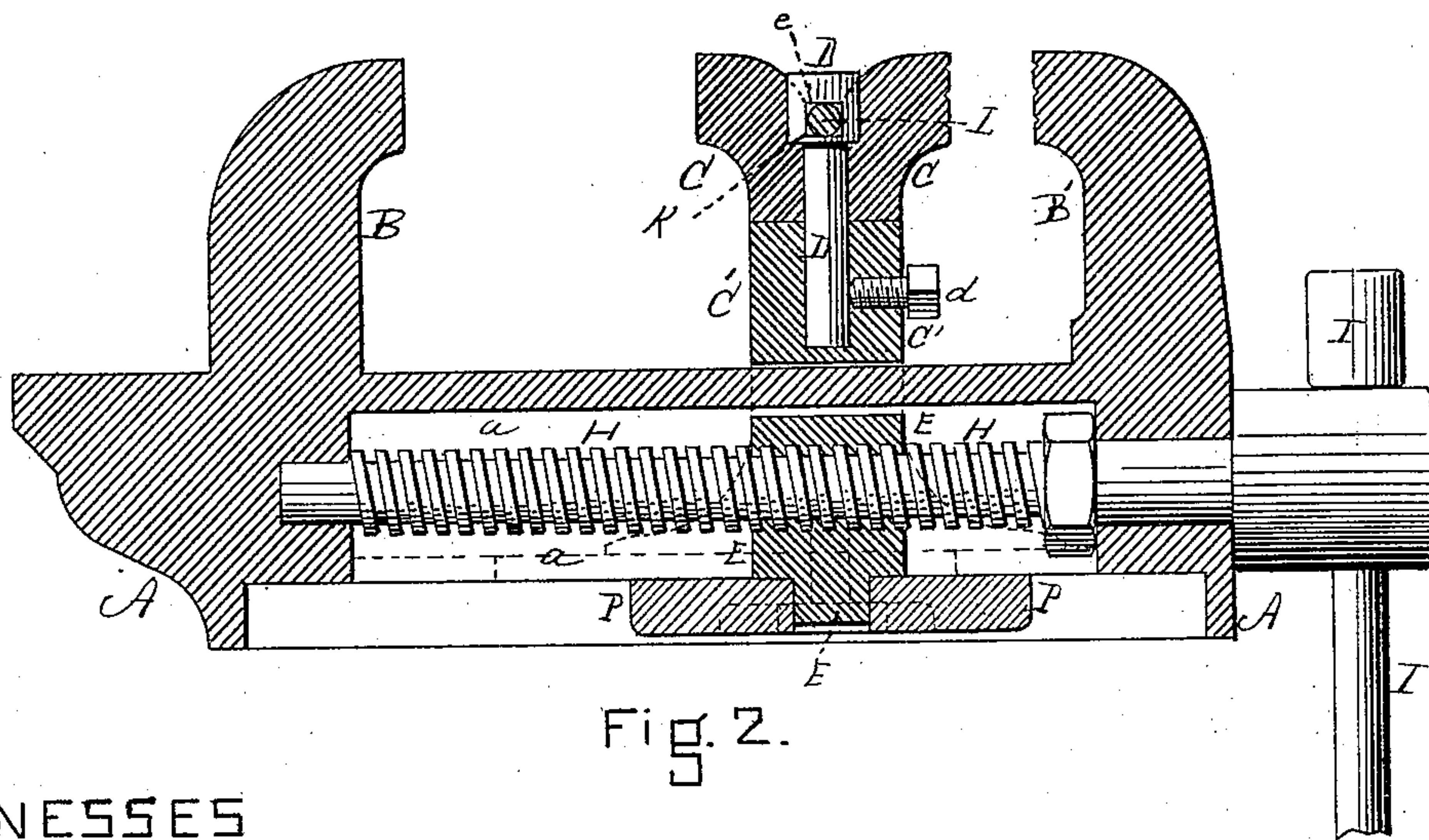


Fig. 2.

WITNESSES

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SPECIFICATION forming part of Letters Patent No. 287,271, dated October 23, 1883.

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To all whom it may concern:

Be it known that I, PORTER A. GLADWIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Vises, of which the following is a specification.

This invention relates to that class of vises known as "bench" vises, more particularly, and is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention, and Fig. 2 is a longitudinal vertical section of the same.

Similar letters of reference indicate like parts.

A is the base, adapted to be secured to the bench in the ordinary manner, and provided with the two stationary jaws B and B', situated near the opposite ends of the vise. The jaw B is usually made plain and the jaw B' serrated, as shown, although either or both may be plain or serrated.

Between the stationary jaws B B' is placed a movable jaw, C. This jaw is capable of horizontal and rotary movement, it being free to turn on the pivot D, secured by means of the set-screw d, or in any suitable manner, in the base C' of said jaw, and said base C' being bolted to a sliding plate, P, which supports a nut, E, upon the screw H. The threaded portion of this screw lies in the chamber a of the base A, and the screw is turned by the bar I in the ordinary manner. Suitable slots, b, are made in the base A, to accommodate the sliding base C' of the jaw C.

The jaw C has preferably a plain and a serrated face, to conform to the plain and serrated stationary jaws B B'.

It will readily be seen that if an irregular piece is placed in the vise—i. e., a piece whose sides are not parallel—the central jaw, C, will turn on the pivot D as it is forced against the piece, and will accommodate itself to the angle of the surface presented, and thus a firm grip is obtained. The jaw C may be so turned that the grip will be had with the ends or corners of it, if desired.

K is a groove made in the jaw C, and, a hole, e, being made in the head of the pivot D to

coincide with said groove, the jaw C may be converted into a stationary one by thrusting a rod into the groove K and through the hole e. Such a rod is shown in section at L, Fig. 2. A groove or slot may be substituted for the hole e, if desired; or a hole may be substituted for the groove K.

It will be readily seen that by removing the pivot D jaws of different sizes and shapes may be applied to the vise.

By means of the two stationary jaws B B', one having a smooth and the other a roughened face, and the movable jaw C, having both a smooth and a rough face, the work of two vises is done in one, and all the various descriptions of work can be accommodated in one vise.

I am aware that a wrench has been constructed with a central jaw adapted to be moved into teeth or serrations, so as to be nearer one or the other of two stationary jaws, but incapable of exact adjustment, and having no screw.

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

1. A vise consisting, essentially, of two stationary jaws secured to a base, and a movable jaw situated between said stationary jaws, said movable jaw being adapted to move back and forth between said stationary jaws, and to rotate, substantially as and for the purpose set forth.

2. In a vise, the combination, with two stationary jaws secured to a base or frame, of a sliding swiveled jaw between said stationary jaws, substantially as and for the purpose described.

3. The combination, with the base A, provided with the stationary jaws B B', of the jaw C, swiveled to the sliding base C', substantially as and for the purpose set forth.

4. The combination, with the base A, provided with the stationary jaws B B', slots b, and screw H, of the jaws C, base C', pivot D, slide P, and nut E, all arranged and constructed substantially as and for the purpose described.

5. In combination with the stationary jaws B B', secured to the base A, the swiveled jaw

C, provided with the groove or opening K, and the pivot D, provided with a coincident opening or groove, e, substantially as and for the purpose set forth.

- 5 6. A vise consisting, essentially, of two stationary jaws secured to a base, a movable jaw situated between said stationary jaws, and a

screw by means of which said movable jaw may be operated, substantially as and for the purpose described.

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