

(No Model.)

T. L. HAMILTON.
VISE.

No. 542,442.

Patented July 9, 1895.

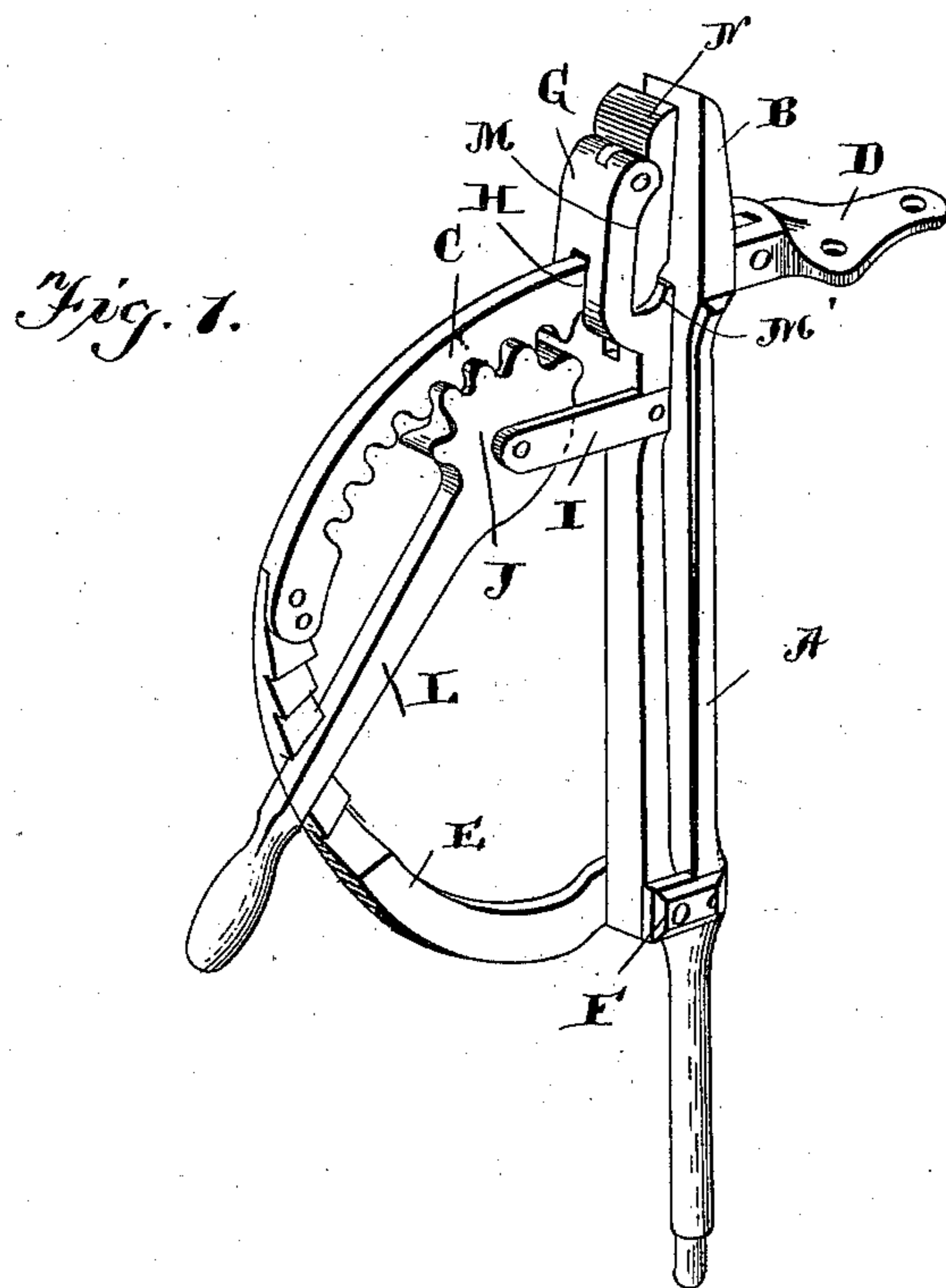
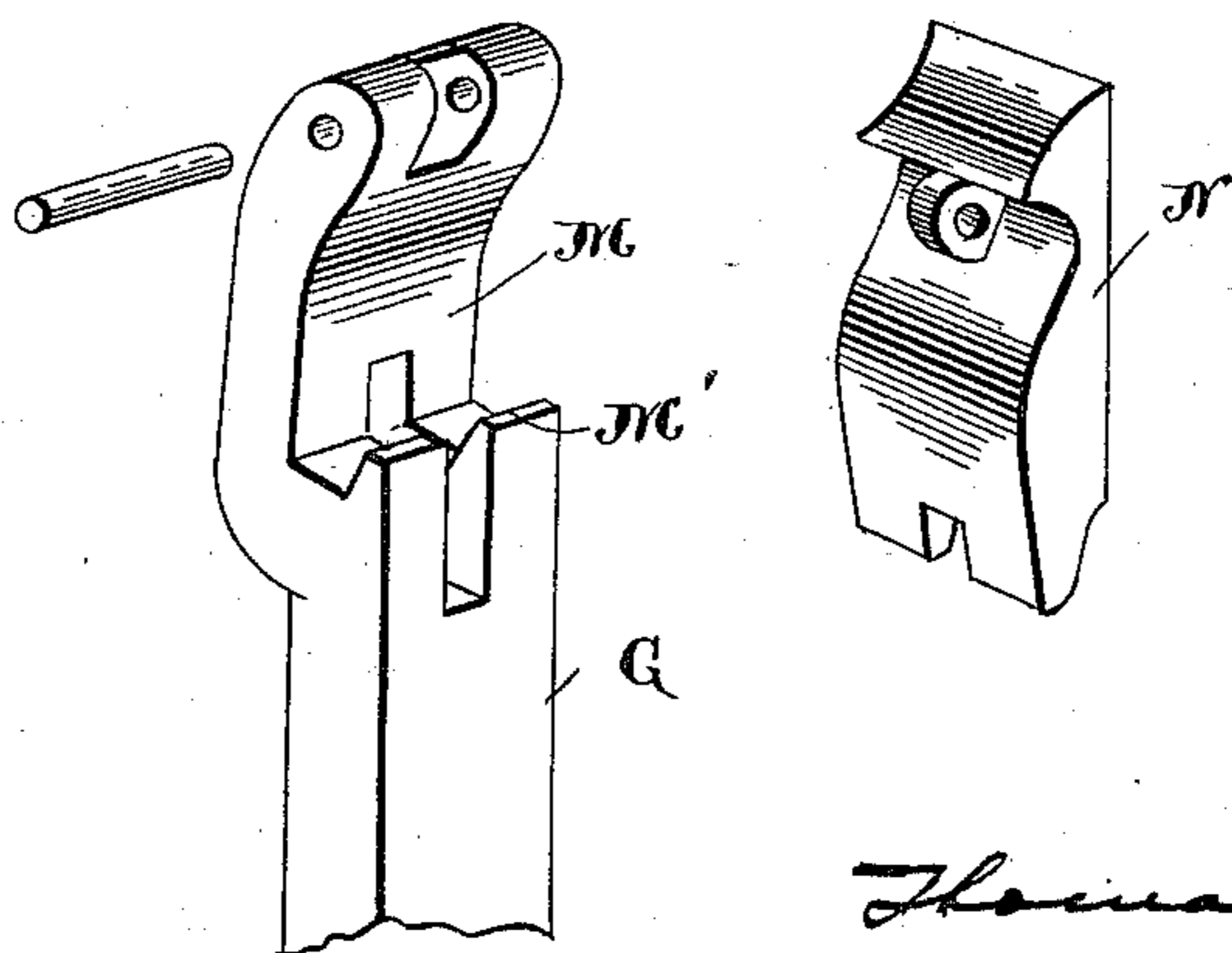


Fig. 2.



Witnesses:

Geo. C. Truch.

James W. Berard.

Inventor.

Thomas L. Hamilton

By Tatum & Nesbit

Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS L. HAMILTON, OF SUMNER, ASSIGNOR OF ONE-HALF TO HENRY D. SMITH, OF ASHBURN, GEORGIA.

VICE.

SPECIFICATION forming part of Letters Patent No. 542,442, dated July 9, 1895.

Application filed March 2, 1895. Serial No. 540,343. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. HAMILTON, of Sumner, in the county of Worth and State of Georgia, have invented certain new and useful Improvements in Vises; and I do hereby 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 it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved vise; and the object of the same is to provide an improved mechanism for adjusting the movable jaw of the vise; and a further object of the invention is to provide said movable jaw with an improved clamping-shoe.

With these objects in view my invention consists in the novel features of construction hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the invention. Fig. 2 is a detailed view of the upper portion of the movable jaw.

A indicates an upright adapted at its lower end to be secured to the floor, and carrying at its upper end the fixed jaw B. Extending through a recess at the base of said jaw is the upper end of the cogged segment C, secured, as shown, to the device D, for attaching the vise to a bench. The segment C, at its lower end, is secured by arm E to the projections F on upright A, so that the segment, the arm, and the said upright are rigid. A movable jaw G is pivotally secured at its lower end to said projection F, and is formed between its ends with the vertical slot H, whereby it is movable over the segment C. From the movable jaw project ears I, between which is pivoted the half-pinion J at the inner end of lever L. The movable jaw is so pivoted that the pivotal point of the said half-pinion forms the center of curvature of the cogged segment, and hence the latter furnishes a tread for the half-pinion, whereby the movable jaw is moved toward or away from the fixed jaw. One side of arm E is provided with the holding-notches K, which are engaged by the lever, thus holding the

movable jaw in the desired position from outward movement and clamping the work thereby in the vise. A downwardly and inwardly extending depression is formed in the inner side of the upper end of the movable jaw, as shown at M, and pivoted between its ends and adapted to depend in said depression in the holding or clamping shoe N. The lower end of this clamping-shoe may be pressed inward so that the surface thereof will stand at an angle to the longitudinal extent of the movable jaw; but the stop M' at the base of the depression M serves to hold said shoe from outward movement at its lower end. By means of this shoe the device may be adjusted for securing a solid hold on irregular pieces of work, and, as will be understood, the same is adjustable automatically to the work in hand.

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

1. An improved vise comprising a fixed jaw, a pivoted jaw, cogged bar C extended outward from said jaw, the notched arm E, the pivoted jaw, the lever carried by the latter and adapted at its handle end to engage the notched arm, and the cogged segment on the inner end of the lever in engagement with the cogged bar, substantially as shown and described.

2. An improved vise comprising the fixed jaw having the recess formed therein, a cogged segment having its end extended through said recess, a securing device attached to said end, the movable jaw pivoted at its lower end and provided at its upper end with the vertical slot whereby it is adapted to move on said cogged segment, the pinion pivotally supported by the movable jaw and engaging the cogs of the segment, and a lever extended from the pinion and provided with a locking means, substantially as shown and described.

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

THOMAS L. HAMILTON.

Witnesses:

J. C. HICKMAN,
J. A. COMER.