

(No Model.)

W. LOREY.
VISE.

No. 407,486.

Patented July 23, 1889.

fig. 1.

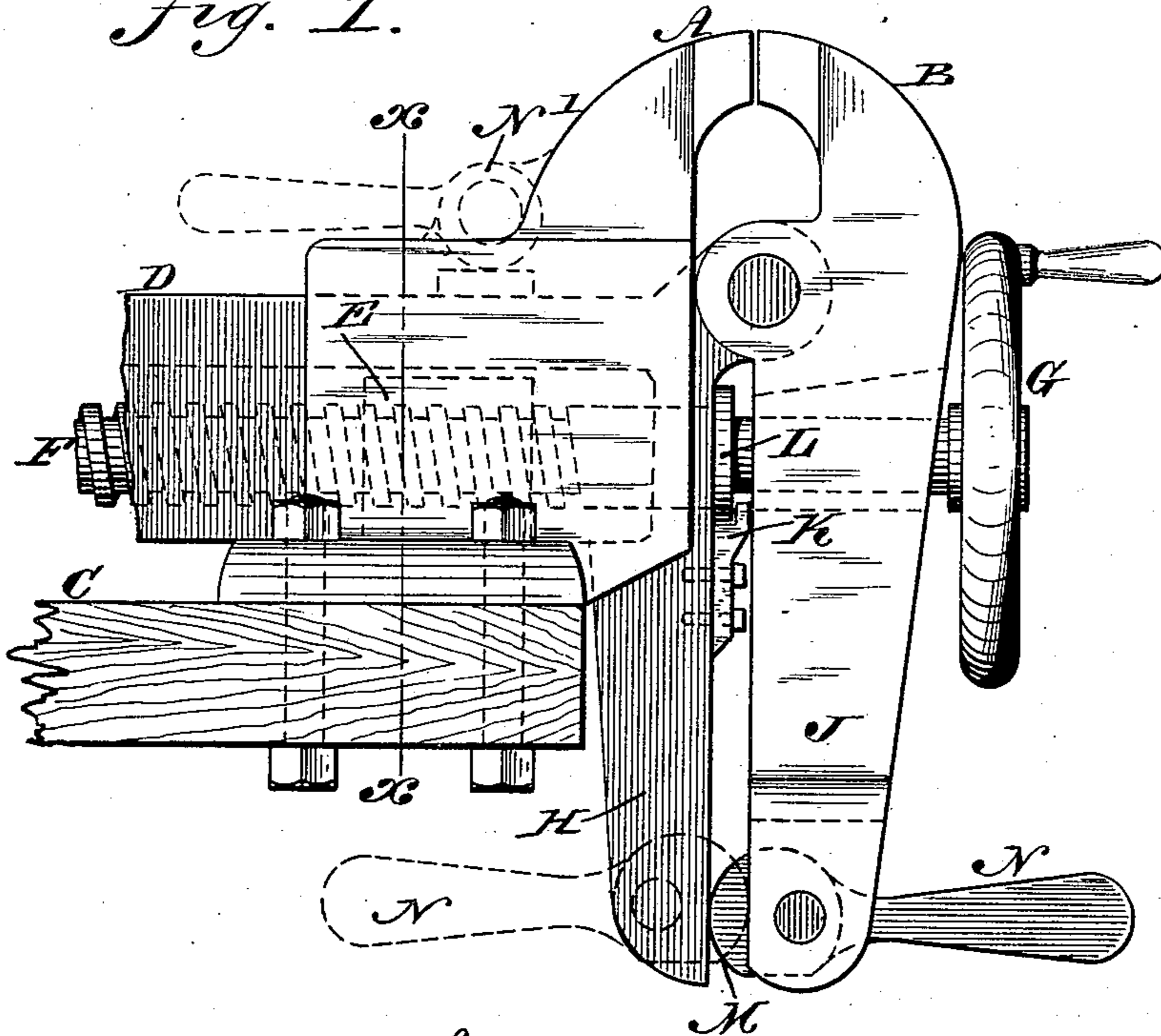
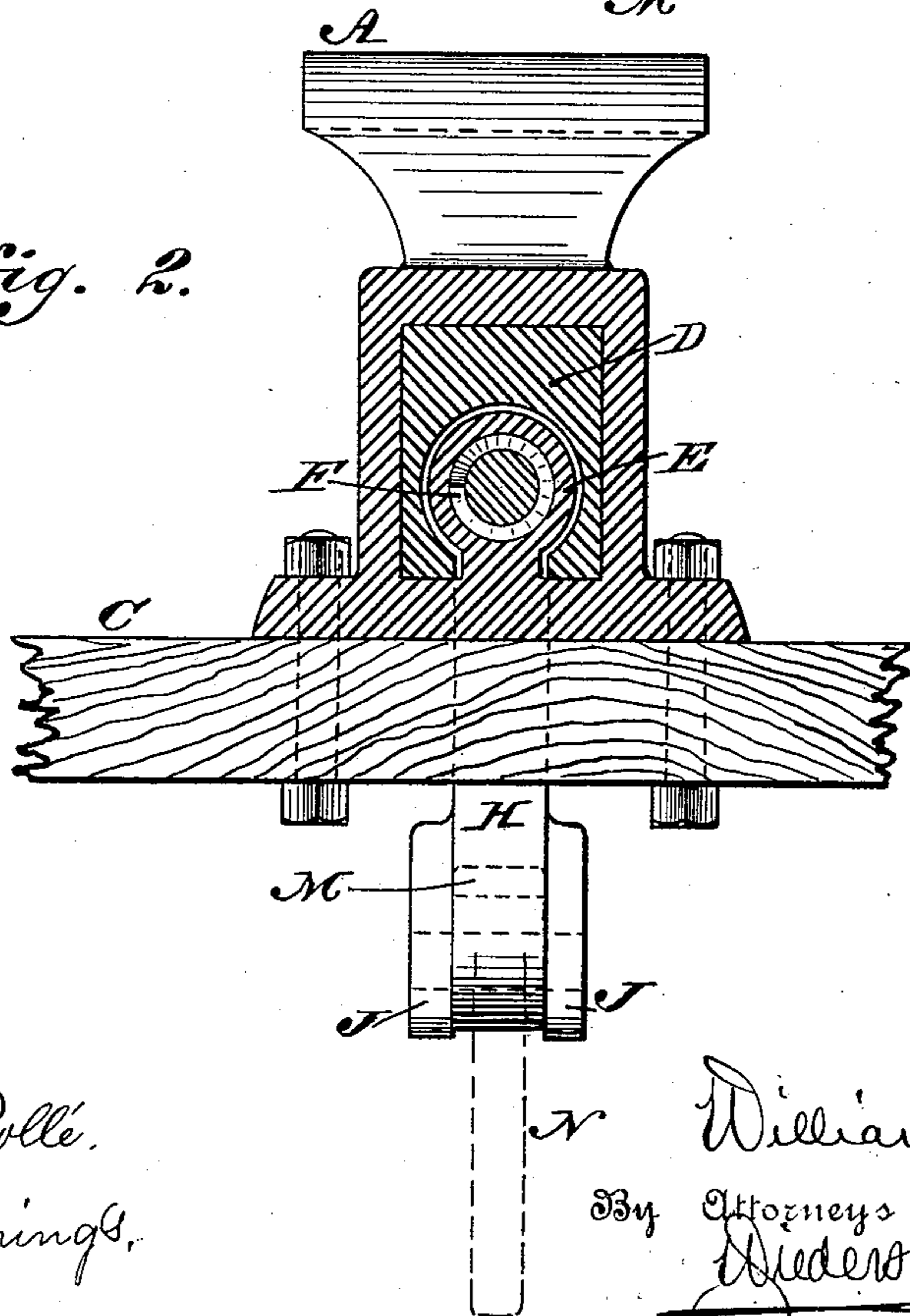


fig. 2.



Witnesses

Theo. Rolle.

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By

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UNITED STATES PATENT OFFICE.

WILLIAM LOREY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO CHRISTIAN GETZ, OF SAME PLACE, AND FREDERICK S. DICKENSHIED, OF HOSENSACK, PENNSYLVANIA.

WISE.

SPECIFICATION forming part of Letters Patent No. 407,486, dated July 23, 1889.

Application filed February 18, 1889. Serial No. 300,321. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LOREY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Vises, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a vise having a movable jaw pivotally attached to a slide, and provided with a depending leg, a stationary slide with a depending leg, and an eccentric pivoted to one of said legs and adapted to bear against the other, so as to aid in clamping the jaws.

It further consists in the combination and arrangement of parts, as herein set forth and claimed.

Figure 1 represents a side elevation of a vise embodying my invention. Fig. 2 represents a vertical section thereof on line $x x$, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A and B designate the jaws of a vise, the jaw A being fixed to the bench C or other support, and the jaw B being pivoted to a slide D, which extends freely through the jaw A and freely over a nut E, which is secured to the base of the jaw A or to the bench C. Fitted in said nut E is a screw F, which also passes freely through the slide D and is swiveled thereto, and furthermore passes freely through the jaw B, its outer end carrying a crank-wheel or handle G, whereby said screw may be conveniently and properly operated. Depending from the slide D is a leg or piece H, which extends parallel with the depending leg or piece J of the jaw B at the back of the same. The screw F in the present case is swiveled to the slide D by means of a neck K, which freely encircles a collar L on the shank of the screw.

To the bottom of the leg J is pivoted an eccentric M, which is adapted to bear against the bottom of the leg H, and is provided,

substantially as described and claimed, with a handle N, for operating purposes.

It will be seen that when the jaws are to be opened the screw F is rotated in the proper direction, whereby the jaw B separates from the jaw A in a parallel motion, it being seen that the slide D and leg H follow said jaw B. When the jaws are sufficiently opened to admit the article to be held, the eccentric is operated, whereby the jaw B is forced toward the jaw A, and the article between them is clamped or held in a powerful manner, it being seen that the slide, and consequently the jaw A, is prevented from shifting, owing to the swiveled connections of the screw with said slide. When the eccentric is operated in the opposite direction, the jaws are released of their holding action on the article, and the latter may be withdrawn.

If desired, the screw and nut may be dispensed with. In this case the jaw B may be pushed in and out by hand, and when it is at about the proper adjustment in relation to the jaw A the slide may be held by an eccentric N', which is pivoted to the jaw A and tightened against the slide D, as will be seen by the dotted lines, Fig. 1, the legs H J and eccentric M being preserved.

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

1. A vise having a stationary jaw, a movable jaw, a slide to which the movable jaw is pivoted, legs which depend from said slide and movable jaw, and an eccentric which is pivoted to one leg and adapted to tighten against the other jaw, substantially as described.

2. A vise having a stationary jaw, a slide working in said jaw, a movable jaw pivoted to said slide, a nut secured to said stationary jaw, a screw swiveled to the slide and freely passing through the movable jaw and working in said nut, the said slide and movable jaw each having a depending leg, and means

connected to one of said legs for clamping
said jaws, said parts being combined sub-
stantially as described.

3. In a vise, jaws having parallel motions
5 in opening and closing, in combination with
a slide to which the movable jaw is pivoted
and an eccentric which is mounted on said

jaw in order to close the same against the
other jaw, substantially as described.

WILLIAM LOREY.

Witnesses:

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