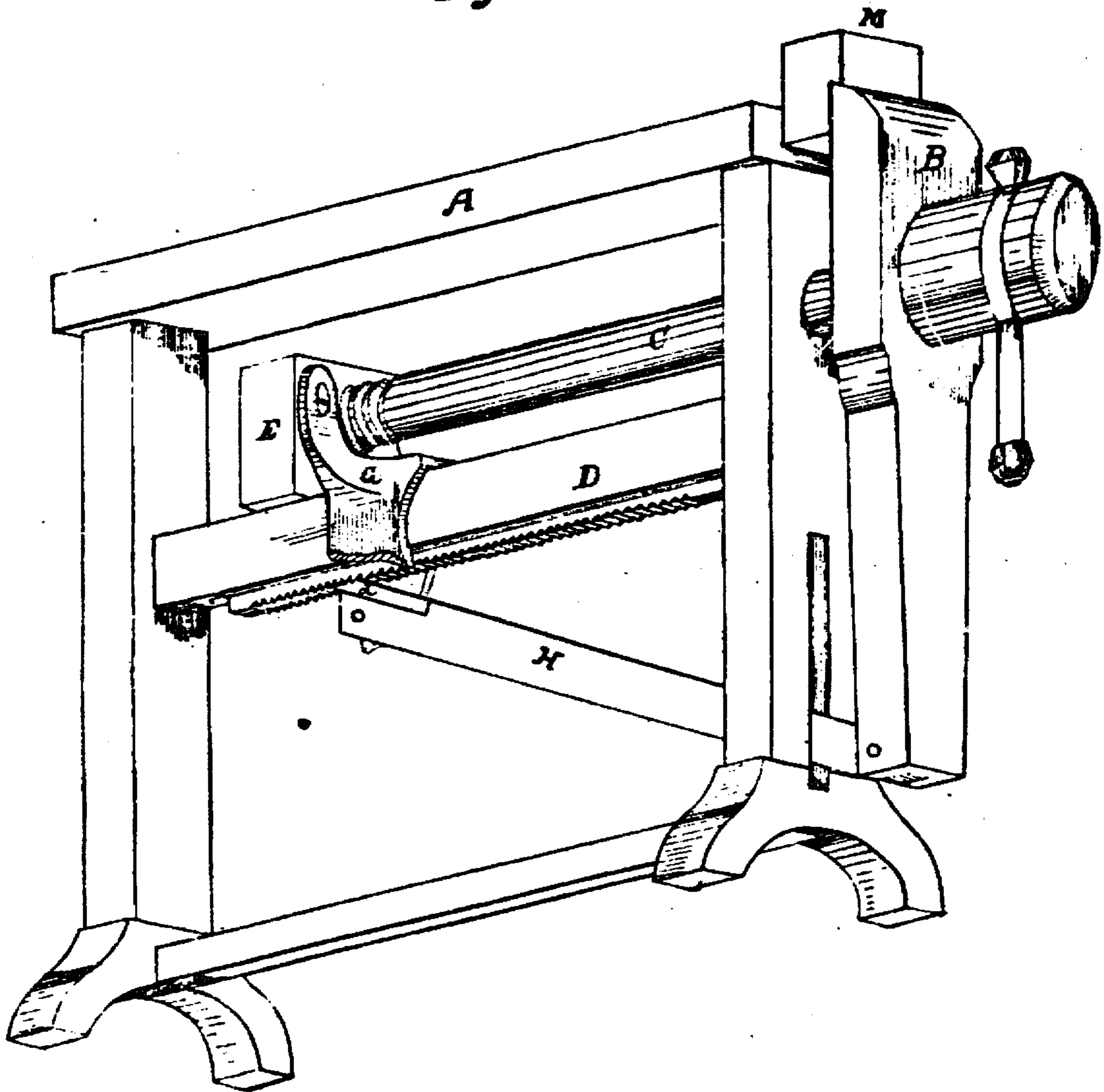


O. V. Flora.
Carpenters Vise.
Nº 79565 *Patented Jul. 7, 1868.*

Fig: 1.



Witnesses.

McConnell

H. C. Smith

Inventor.

Olando V. Flora

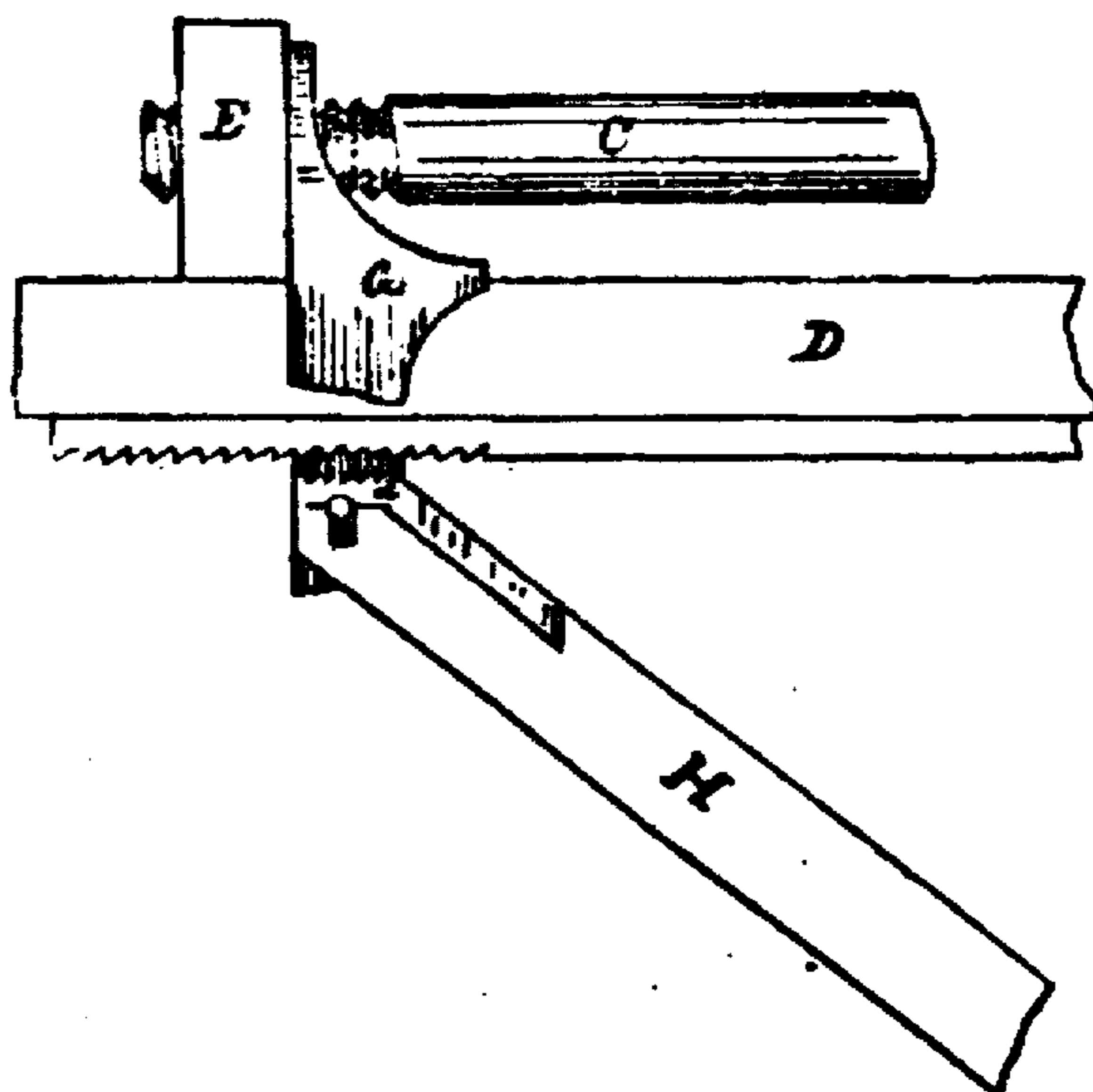
O. V. Flora.

Carpenters Vise.

N^o 79565

Patented Jul. 7, 1868.

Fig: 2.



Witnesses.

McConneltt

W. C. Smith

Inventor.

Orlando V. Flora

United States Patent Office.

ORLANDO V. FLORA, OF MADISON, ASSIGNOR TO HIMSELF, GEORGE SHANNON, AND D. C. ROBINSON, OF JEFFERSON COUNTY, INDIANA.

Letters Patent No. 79,565, dated July 7, 1868.

IMPROVEMENT IN CARPENTERS' VISES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ORLANDO V. FLORA, of Madison, in the county of Jefferson, and State of Indiana, have invented new and useful Improvements in Parallel Vises; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to that class of vises which are adjusted for clamping large or small work by means of ratchets, while a screw is used in conjunction with the ratchet, for the purpose of holding the work firmly in the jaws, a half turn of the screw being sufficient for that purpose.

Figure 1 is a perspective view of the vise, with a part sectioned.

Figure 2 is a side elevation of the working part.

Similar letters of reference indicate corresponding parts.

A is the table or bench, and B the loose jaw of the vise.

C is a sliding beam, with a few inches of screw-thread cut on its rear end, which turns in the nut E, simply for tightening the jaws against the article to be clamped, shown at M.

The saddle-piece G is attached rigidly to the nut E, and slides on the stationary bar D, on the under side of which is the ratchet C.

Through the lower part of the saddle-piece G is passed a bolt, on which is pivoted the diagonal brace H, said brace being attached at or near the lower end of the movable jaw B, and passes backward and upward through a vertical slot in the stationary jaw of the vise. This keeps the movable jaw always in a position parallel, or nearly so, with the stationary jaw.

On the rear end of the brace H is the ratchet-plate *d*, which is permitted to engage and disengage with the ratchet C because of the opening in the rear end of the brace H being enlarged vertically. These ratchets engage when any article (M, fig. 1) is placed in the jaws, and the screw tightened, by the action of the movable jaw B pressing the diagonal brace H upward, and thus locking the nut E and saddle-piece G firmly to the stationary bar D.

To unclamp, the screw is first reversed till the article, M, is loosened, and then the beam C is free to move or slide in or out, at the pleasure of the operator, taking care to slide the jaw B up to the article to be clamped before turning the screw.

The ratchets are shown engaged in fig. 1, and disengaged in fig. 2.

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

The combination of the saddle-piece G with the short ratchet on the end of the brace H, having the vertically-slotted opening in the said ratchet-brace, thus rendering the disengagement of the ratchets *c* and *d* automatic, when the article clamped is released, substantially as specified.

Witnesses:

HENRY CONNETT,
A. M. CONNETT.

ORLANDO V. FLORA.