

J. H. Lewis

Vise.

N^o 89,671.

Patented May 4, 1869.

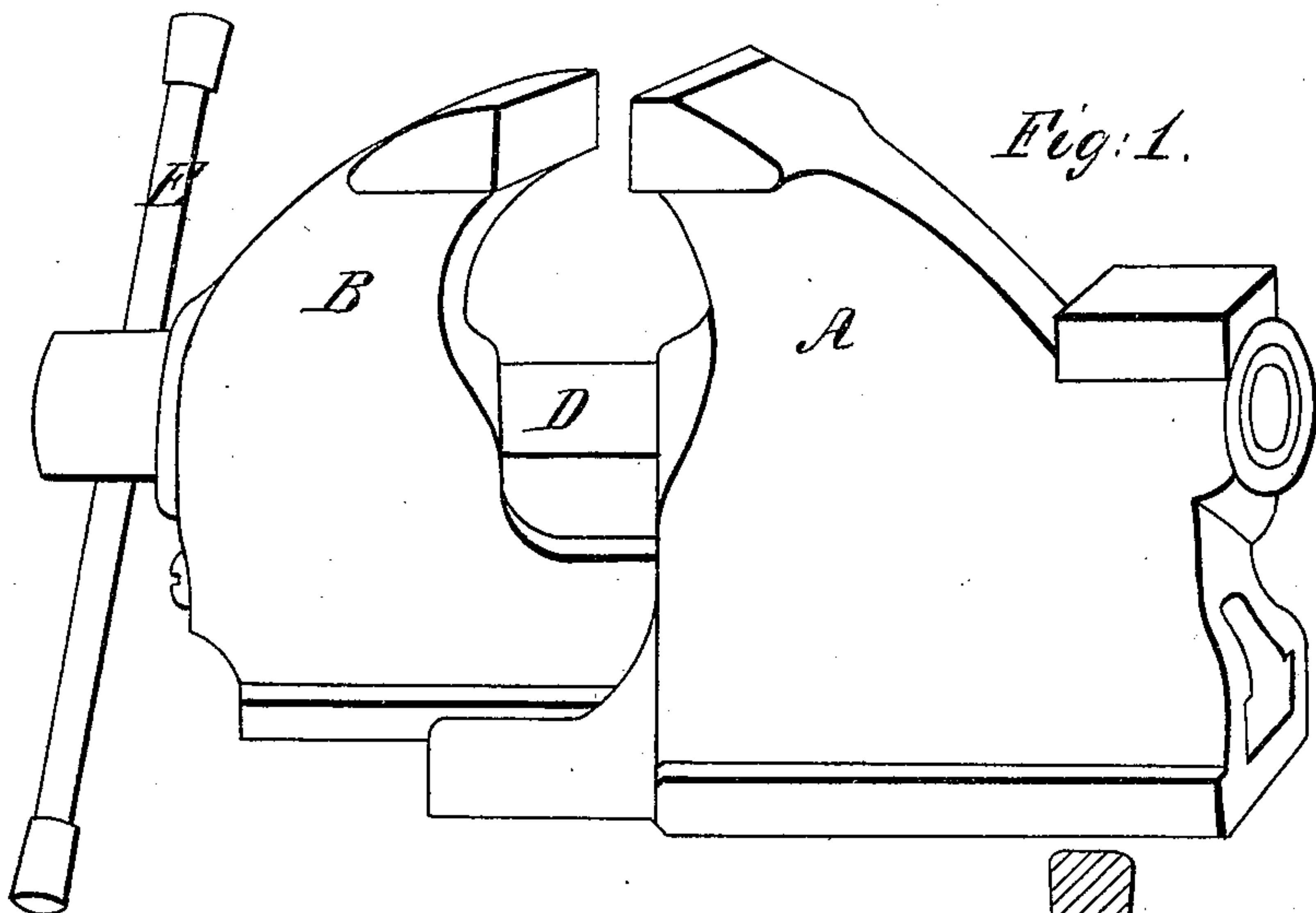


Fig: 1.

Fig: 2.

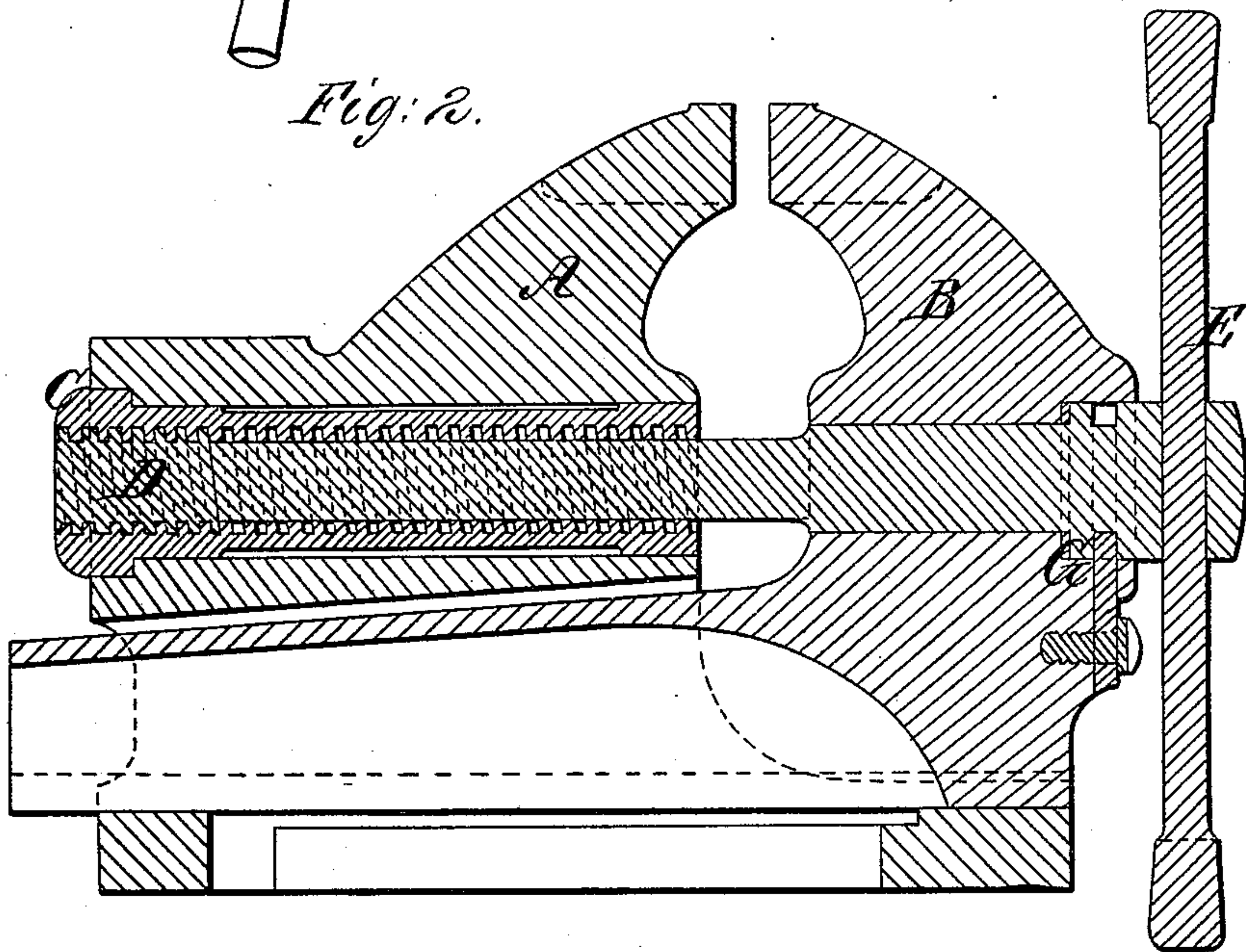


Fig: 3.

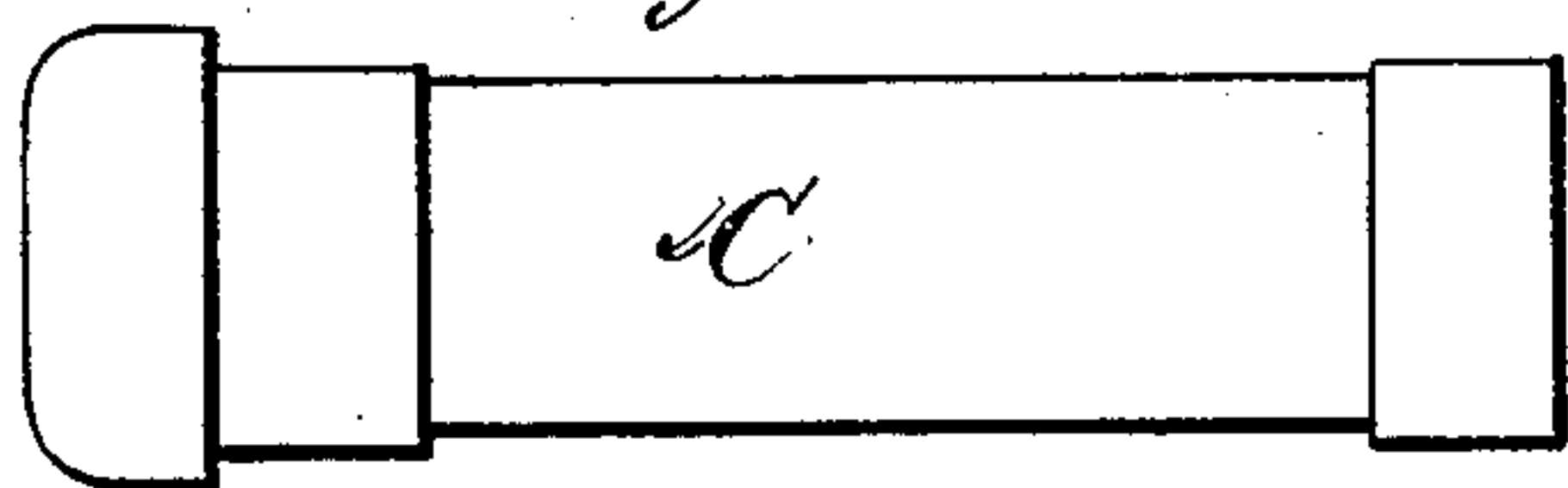
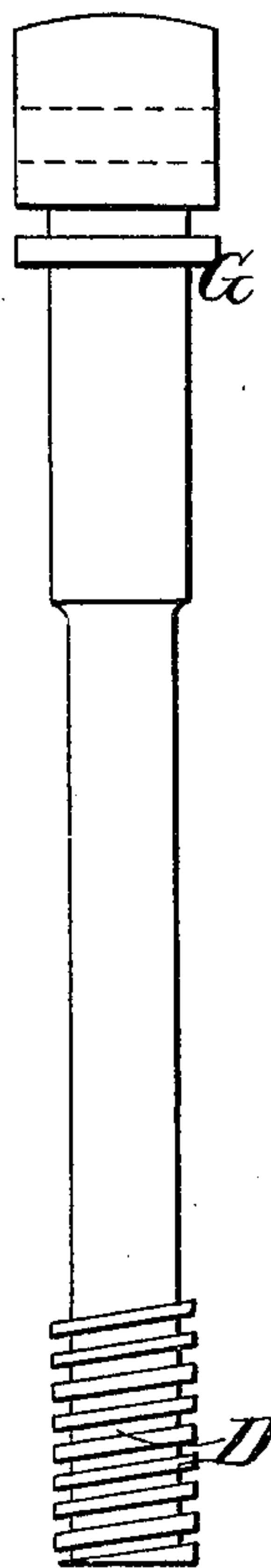


Fig: 4.



Witnesses;
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United States Patent Office.

JOSEPH H. LEWIS, OF DUXBURY, MASSACHUSETTS.

Letters Patent No. 89,671, dated May 4, 1869.

IMPROVED VISE.

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, JOSEPH H. LEWIS, of Duxbury, in the county of Plymouth, and State of Massachusetts, have invented certain Improvements in Vises; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

With reference to the drawings—

Figure 1 is a perspective view.

Figure 2 is a vertical section through the axis of the screw and all parts in that plane.

Figure 3 shows the nut separately.

Figure 4 is a separate view of the screw.

Like letters refer to the same or corresponding parts in all the figures.

A is the stationary jaw.

B is the movable jaw, or sliding jaw, fitted to slide in the base of jaw A as a guide.

C is a nut.

D is the screw.

The parts are mainly constructed in the ordinary manner, with the exception of the screw and nut.

The screw D is constructed with sufficient length of thread, at the end opposite to the shoulder G and handle E, to sustain the wear and strain incident to service, while between the threaded portion and the shoulder G is constructed the shank, or blank portion, reduced to about the size of the smallest internal diameter of the nut, or the diameter of that portion of the screw between and at the root, or base of the thread.

The screw is furnished with a shoulder, G, groove,

and other necessary parts, to connect it to the movable jaw, in which it is confined in such manner as to be free to turn.

The screw D is arranged to turn in and traverse the nut C, which may be formed directly in the body of the stationary jaw, or the nut may be made separately from the jaw, as shown in the drawing.

The nut is made of a length equal to the movement of the screw and the threaded portion of the screw added, and for this whole length the nut is threaded.

The nut is stationary in the stationary jaw A.

To operate the vise, the screw D is turned, which causes it to traverse the internal threaded stationary nut C, giving motion thereby to the movable jaw B.

The screw is always, when in use, within the nut, its blank portion only being exposed. No casing is required to protect the screw-thread. No screw-thread is exposed. The portion of the screw-shank which is exposed between the jaws is smaller, and less in the way of the work held in the vise, than the ordinary screw, or a screw-casing, or an internal threaded rotating-screw, and is therefore superior to them all.

Having described my improvement,

What I claim, and desire to secure by Letters Patent, is—

The arrangement herein described and shown, of the screw-threaded sleeve, or nut C, the screw D, and the jaws A B, all constructed as set forth.

JOSEPH H. LEWIS.

Witnesses:

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