

J. B. Willett,

Vise.

No. 90,800.

Patented June 1, 1869.

Fig. 1.

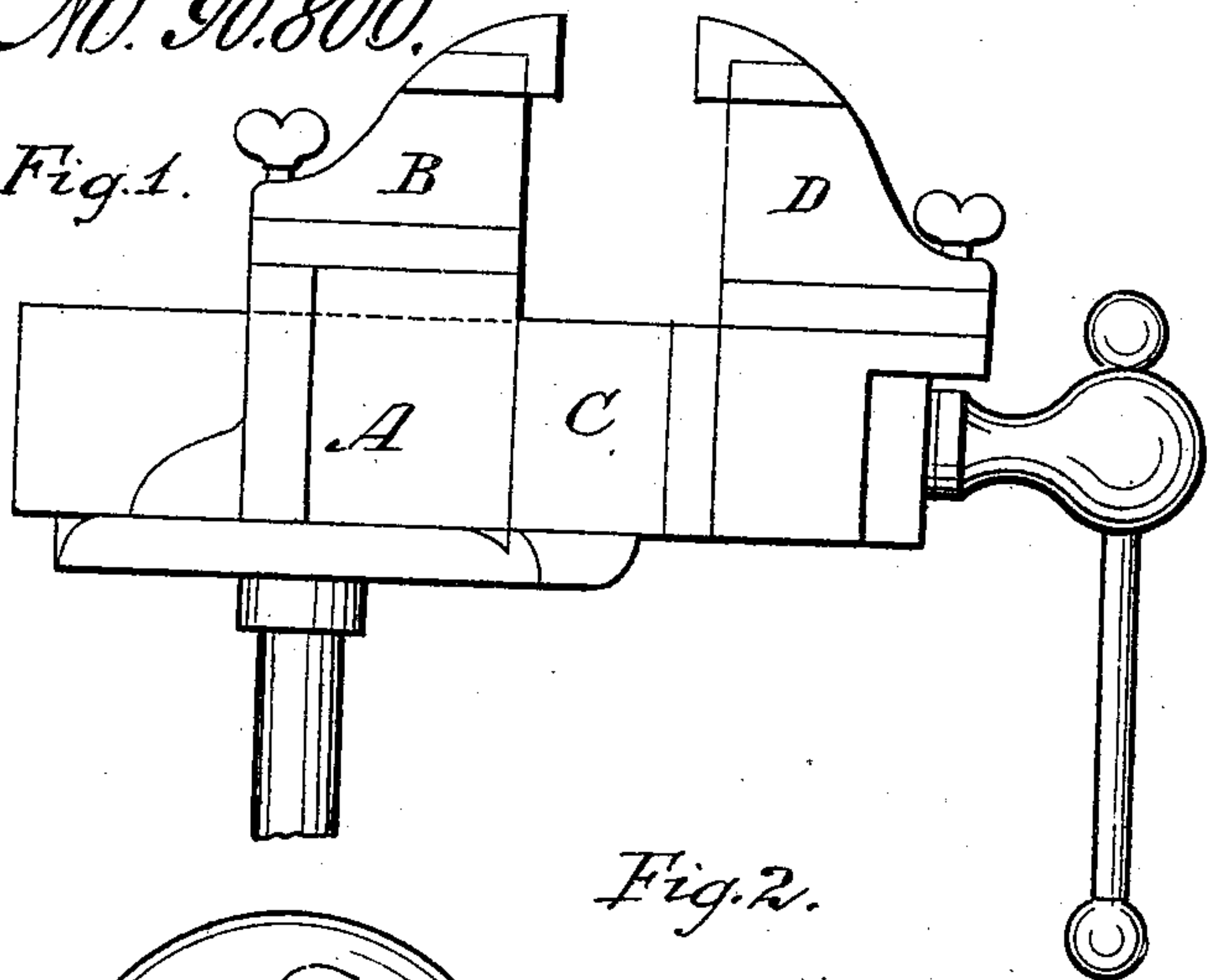


Fig. 2.

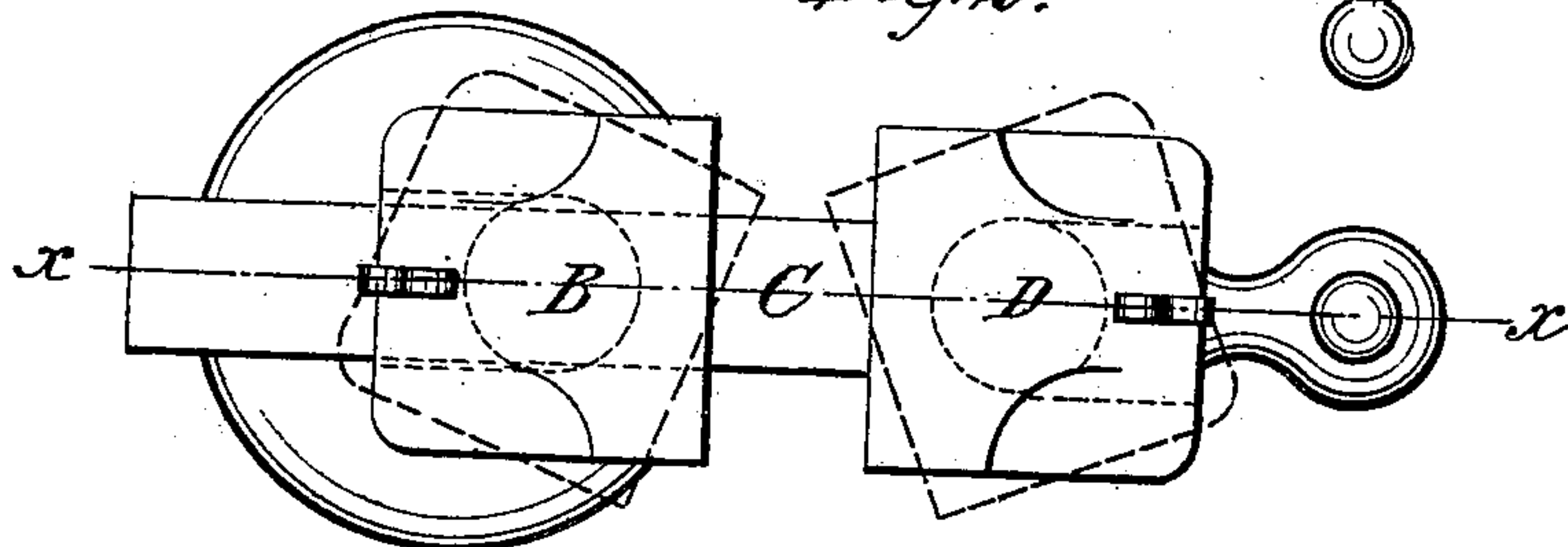


Fig. 3.

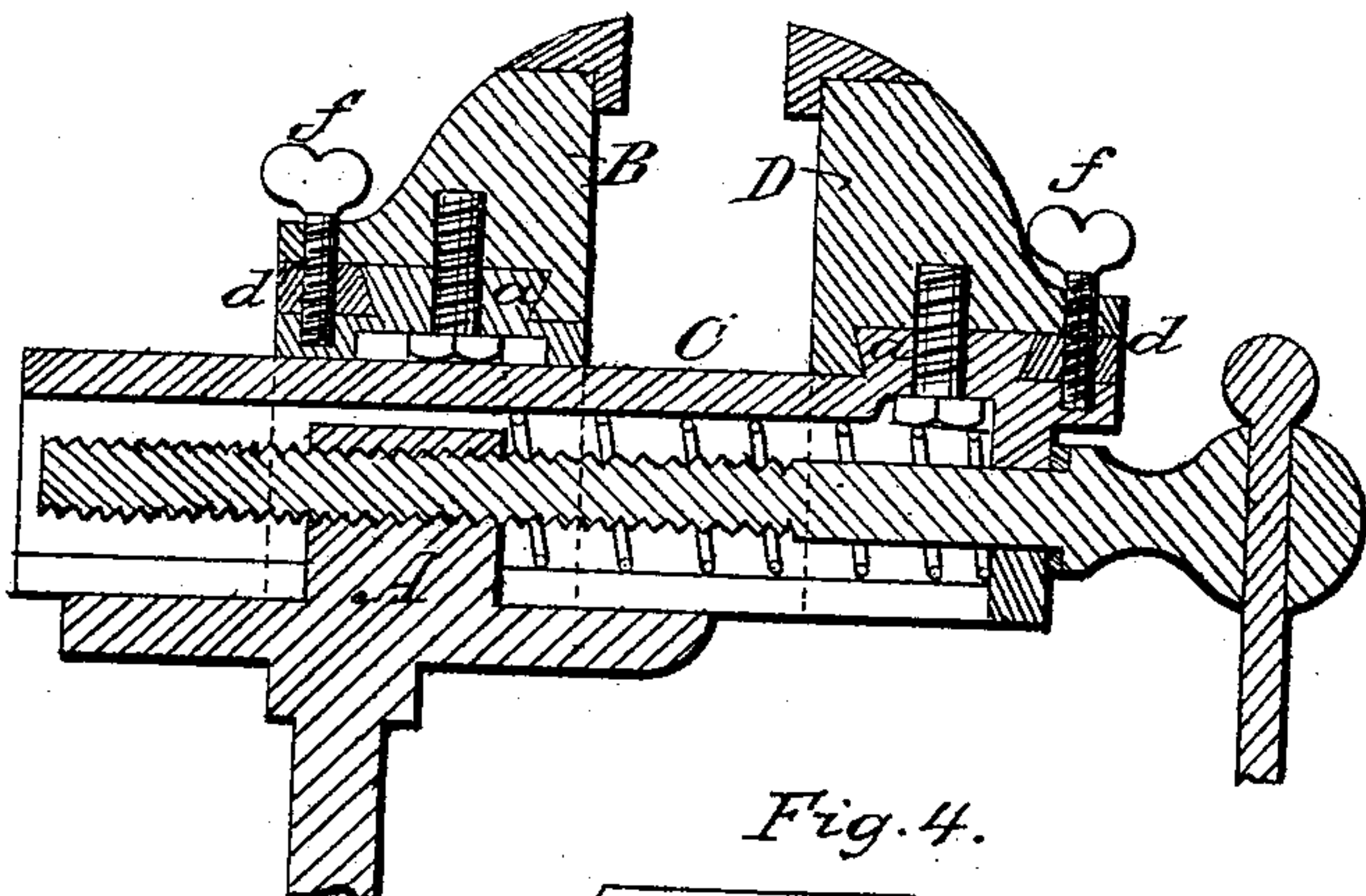


Fig. 4.

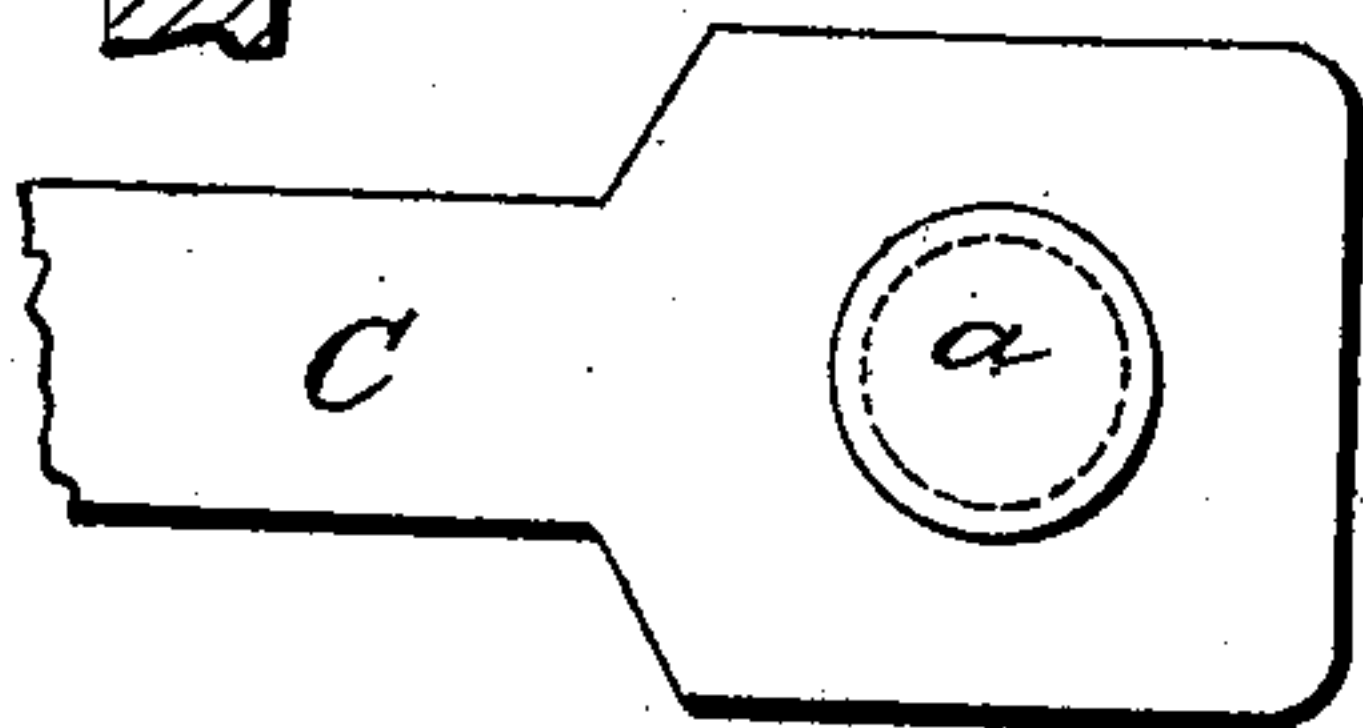


Fig. 5.

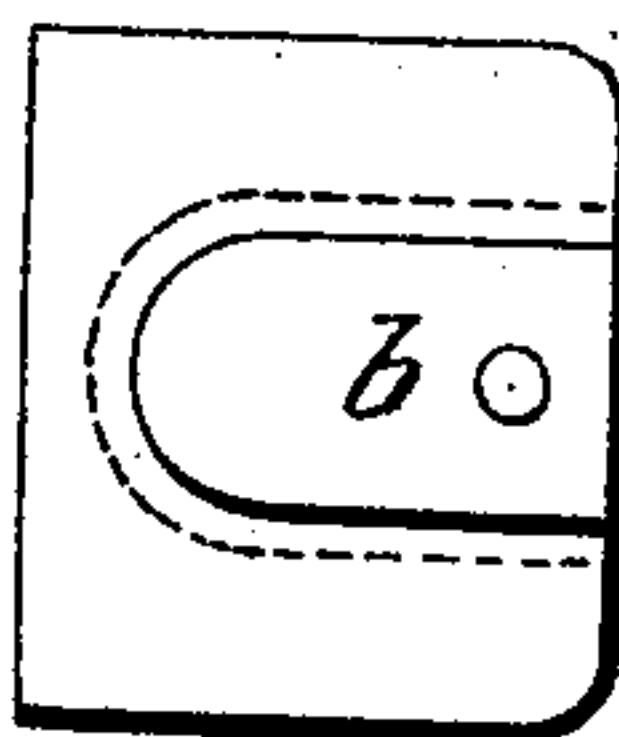
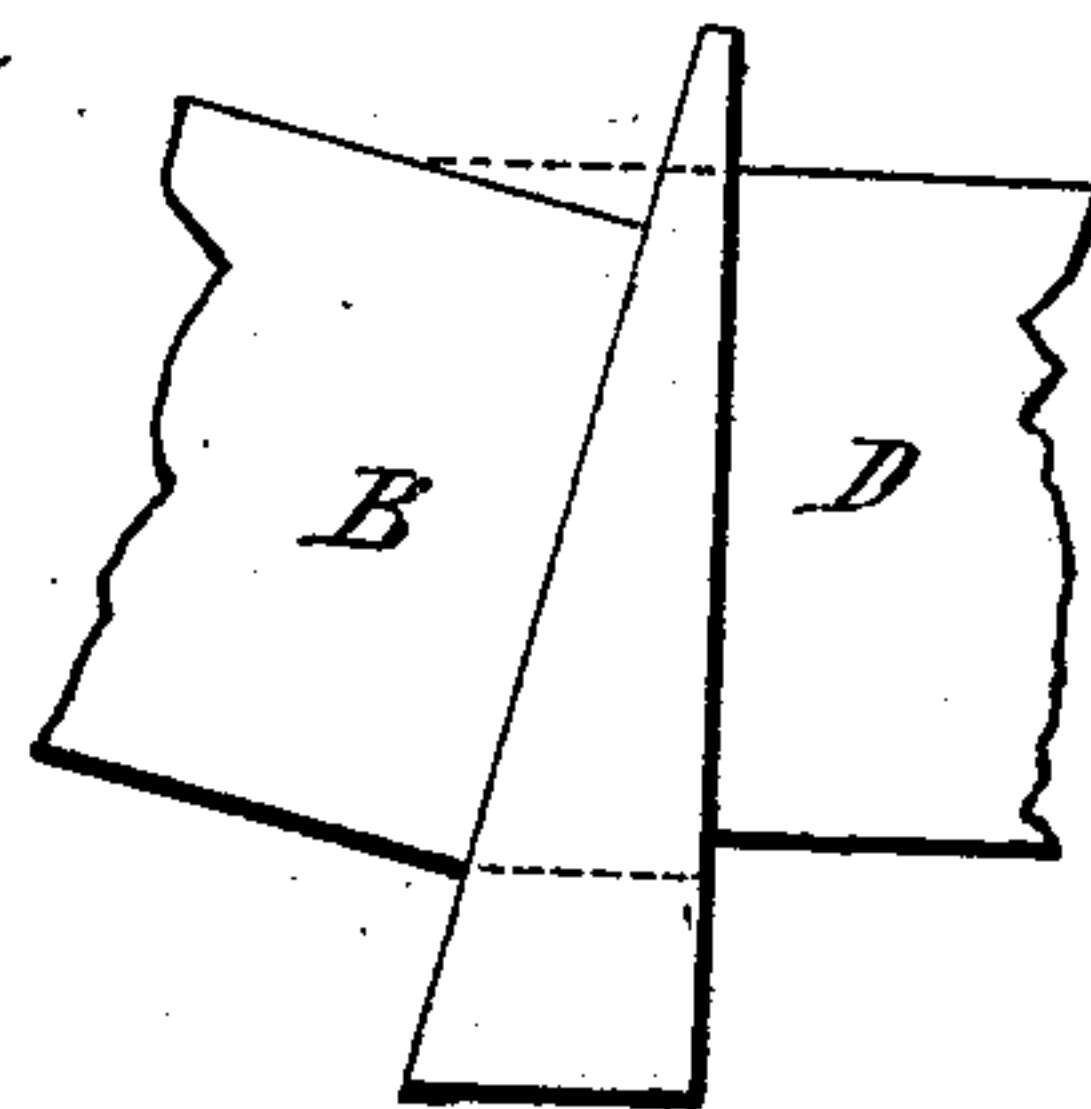


Fig. 6.



Fig. 7.



Witnesses:

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United States Patent Office.

JOHN B. WILLETT, OF WEST MERIDEN, CONNECTICUT.

Letters Patent No. 90,800, dated June 1, 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, JOHN B. WILLETT, of West Meriden, in the county of New Haven, and State of Connecticut, have invented a new and improved Vise; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view;

Figure 2, a top view;

Figure 3, a central section; and in

Figures 4 and 5, detached views.

This invention relates to an improvement in what are known as parallel vises, the object being to construct the vise so that both jaws may be adjustable, to conform to angular pieces which may be placed therein, and, at the same time, be secured in a position parallel to each other.

To enable others to make and use my improvement, I will fully describe the same, as illustrated in the accompanying drawings.

A is the base, to which the stationary jaw B is attached.

C, a parallel bar passing through the base A, to which said bar the travelling jaw D is fixed.

Heretofore, in this class of vises, the two jaws have been rigidly fixed to the base and bar, respectively. In some instances, the cheek of one of the jaws has been made to be turned to an inclination to the other jaw, so as to grasp articles of different, or inclined surfaces, but in such, as the movable jaw turns, it carries one end from and the other toward the other jaw.

The result of this, as seen in Figure 6, is, that the article cannot be operated upon near the end of the jaw. This inclination practically lengthens the two

jaws to the red line in said fig. 6, but by the turning of both jaws, as denoted in red, fig. 2, the position of the jaws always corresponds.

To effect this, I form upon the base and bar, respectively, a circular dovetail projection, *a*, as seen in figs. 3 and 4; then, upon the under side of the two jaws, I cut a corresponding recess, as seen in fig. 5, so that the jaw will slide upon the said projection *a*, until it comes to a bearing. Then into the recess back of the projection, I place blocks *d*, as seen in Figure 7, which fill the space around the projection *a*, and form a bearing upon which both jaws will turn freely to the right or left, as the case may be.

To secure the blocks *d*, and also to secure the jaws in a fixed parallel position, I arrange in each a set-screw, *f*, which passes through the blocks *d*, and into the base of the one and bar of the other, as seen in fig. 3, when the said jaws are in a position parallel to each other.

When it is desired that the jaws, one or both, may turn upon their bearing, withdraw the screw, so as to free the jaws from the base or bar, as the case may be. Then, when the article is placed between the jaws, and the travelling-jaw forced forward, the two jaws will assume a position to firmly grasp and hold the article, as denoted in red, fig. 2.

Having fully described my invention,

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

The dovetail projection *a*, upon the base and bar, and the corresponding recess *b*, in the jaws, with the block *d*, the set-screws *f*, for forming a bearing upon which the jaws will turn, substantially as set forth.

JOHN B. WILLETT.

Witnesses:

GEO. W. SMITH,

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