

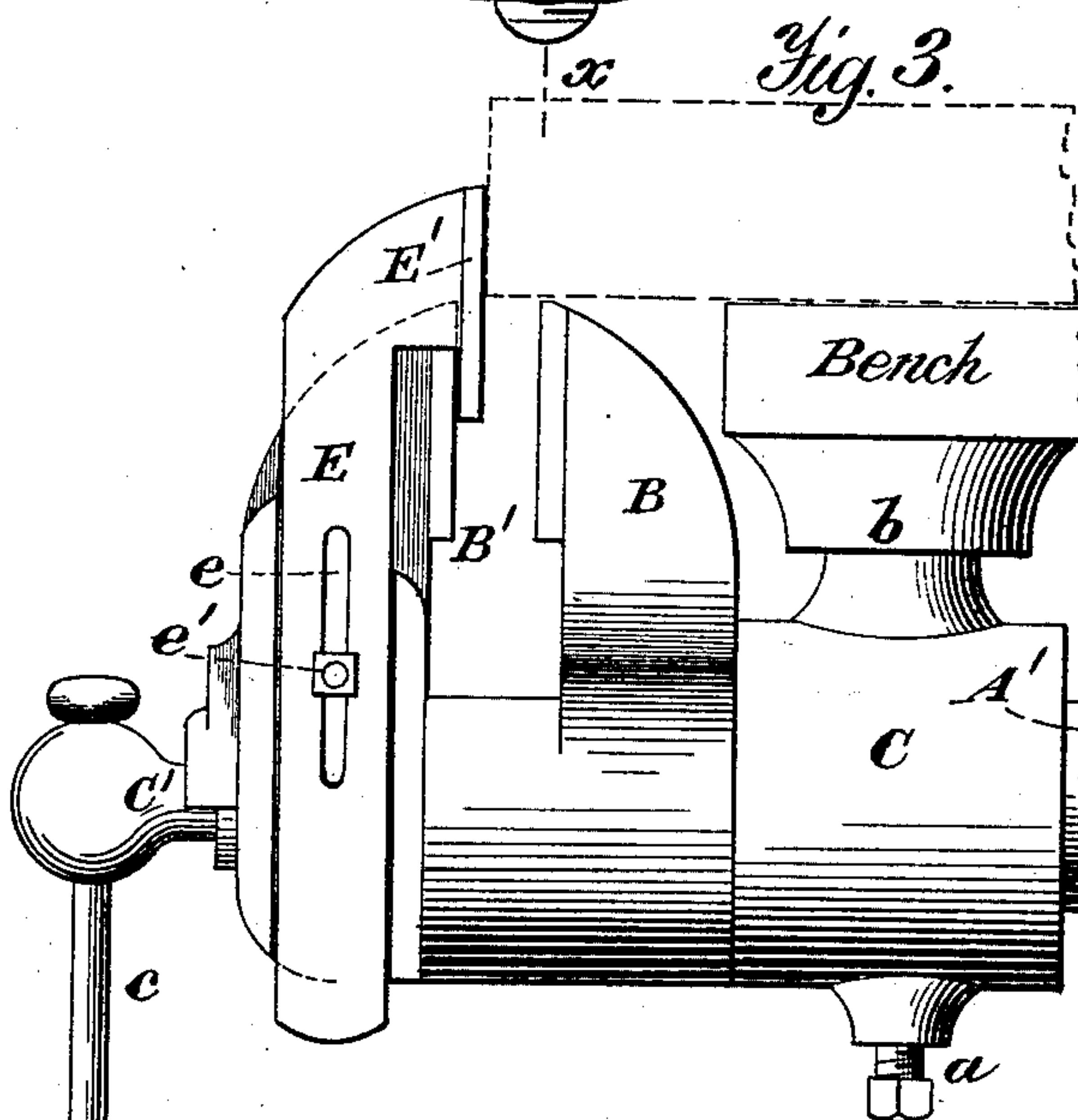
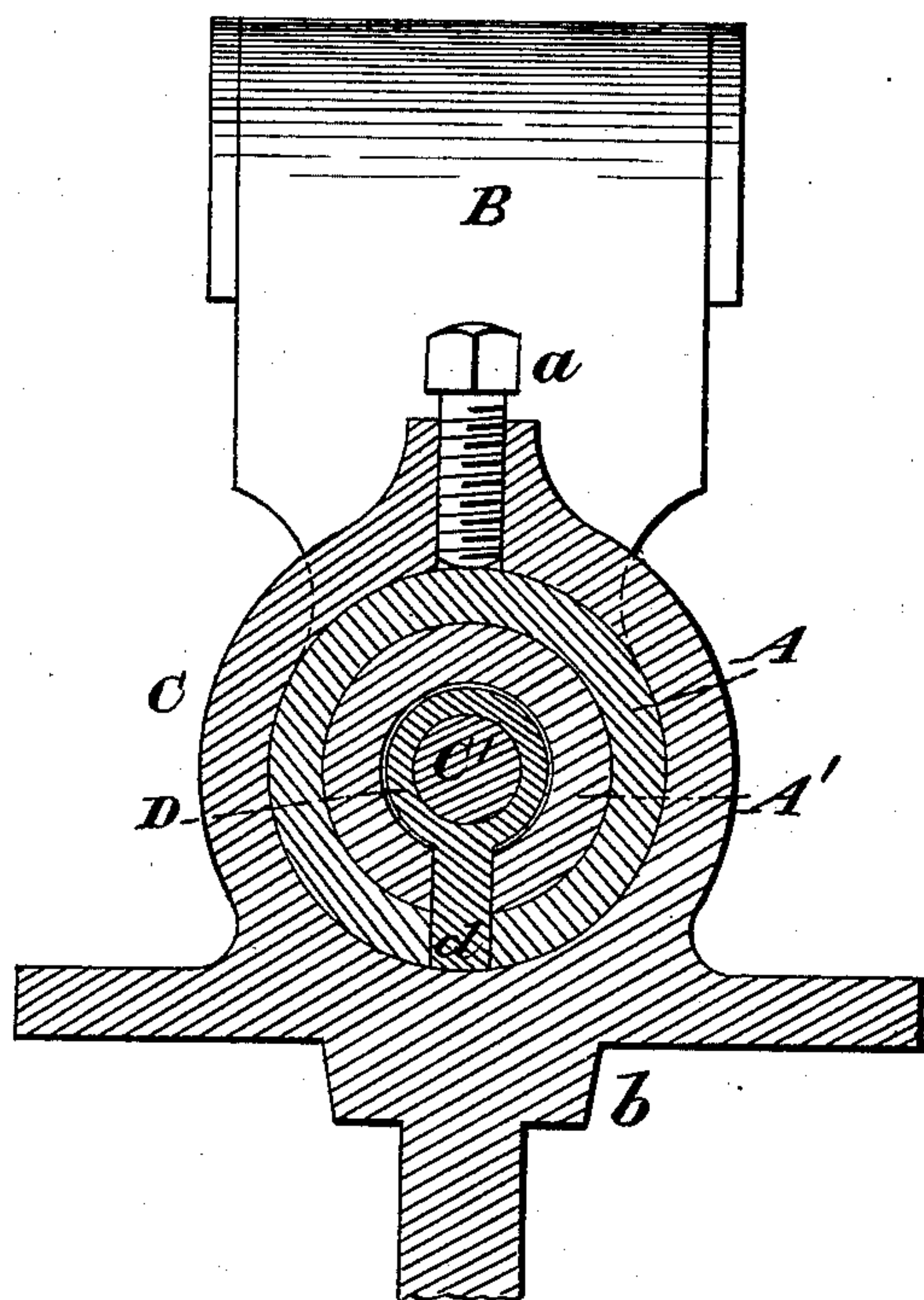
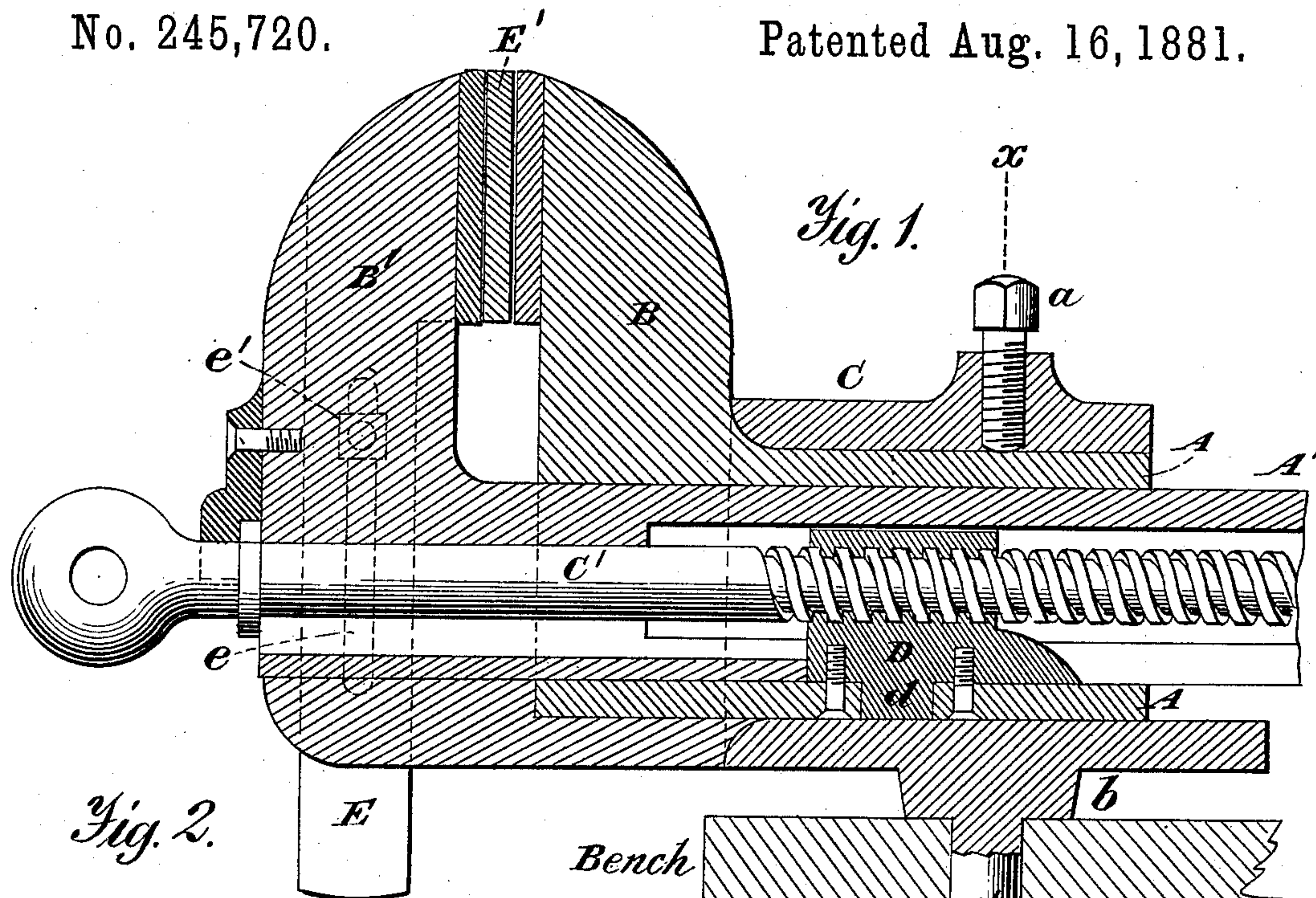
(No Model.)

A. HENDRY.

WISE.

No. 245,720.

Patented Aug. 16, 1881.



Witnesses.
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UNITED STATES PATENT OFFICE.

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SPECIFICATION forming part of Letters Patent No. 245,720, dated August 16, 1881.

Application filed July 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER HENDRY, a citizen of the United States, residing at Fayetteville, in the county of Washington and State of Arkansas, 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a longitudinal section of my improved vise. Fig. 2 is a transverse section thereof. Fig. 3 is a view showing the vise applied to the under side of the bench.

This invention appertains to improvements in vises, particularly for wood-workers, and is capable of arrangement above or upon and under the bench, to serve, in addition to its usual functions, for holding one end of the work while the other end is held by the bench-stop; and it consists in the combination and arrangement of parts, substantially as herein-after more fully set forth and claimed.

To carry out my invention I employ, as will be seen by reference to the accompanying drawings, an outer cylinder, A, having the inner jaw, B, and an inner concentric cylinder or tube, A', having the outer jaw, B'. These jaws may be provided with removable wooden faces to prevent marring of the planed work when held between them. The outer cylinder has adjusted to it by a set-screw, *a*, a collar, C, cast with a securing-base, *b*, and nutted bolt *b'*, for the attachment of the vise to the work-bench.

It will be observed that the vise is capable of being revolved in the collar, or the collar upon the outer cylinder, A, to permit of reversing its point of attachment to the under side of the bench, as seen in Fig. 3. This feature will be further referred to hereinafter.

Connected to the inner tube, A', so as to revolve independently therein and at the same time effect its movement back and forth, is a screw, C', having the usual sliding handle, *c*. This screw is embraced by a tubular nut, D, within the tube A', having a stud, *d*, inserted into and fastened to the outer cylinder, A, as seen in Fig. 1.

As the handle *c* is revolved—it may be to spread apart the jaws—it will be noticed that,

as the nut D is fixed to the outer permanent cylinder, the screw C' will be so acted upon as to effect the movement of the movable jaw B'.

To the sides of the movable jaw B' are applied sliding or adjustable plates E, they having slots *e* and adjusting-screws *e'*, which plates have affixed to their front edges a cross piece or face, E', connecting them together upon the inside of the jaw.

The means for rendering the device E E' adjustable may be modified.

By reversing the attachment of the vise to the under side of the bench, as seen in Fig. 3, it will be observed that the face of the device E E' can be presented toward the end of the bench and be adjusted so as to stand above the top thereof, and thus serve to hold one end of the board being planed or otherwise operated upon while being held by the usual bench-stop at its other end.

While I have described one means for the revolving of the vise, I do not limit or restrict myself to such, as the objects of this invention are obtainable by combining the adjustable jaw device with any revolving vise.

From the foregoing it will be observed that a vise is produced which, when fastened to the upper side of the bench, operates in the usual manner of vises, but which may be secured to the under side of the bench, and inverted in that position, operated in connection with the stop on the bench.

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

1. The combination, with the movable or one jaw of a revolving bench-vise, of the adjustable device E E', substantially as and for the purpose set forth.

2. The combination, with the jaw B', of the revolving bench-vise A A', having the reversible collar-casting *b* and nutted bolt *b'*, of the adjustable device E E', substantially as and for the purpose set forth.

3. The combination, with the jaw of a revolving vise, of the device E E', having slots *e* and adjusting-screws *e'*, substantially as and for the purpose set forth.

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

ALEXANDER HENDRY.

Witnesses:

S. R. STONE,

GEO. H. RIEFF.