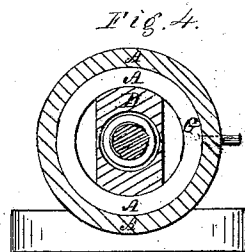
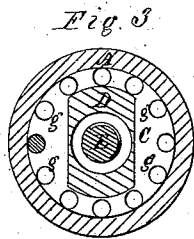
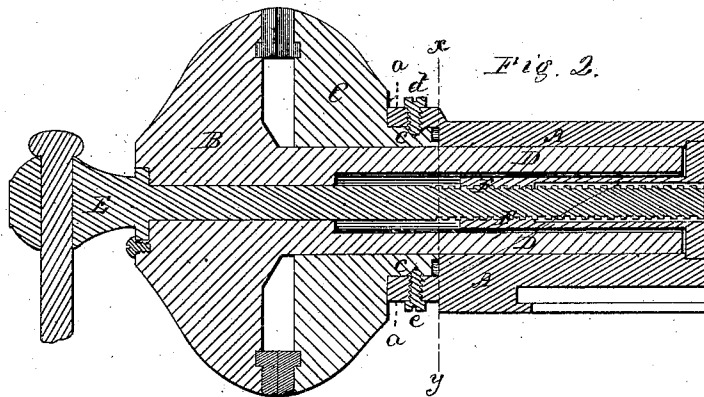
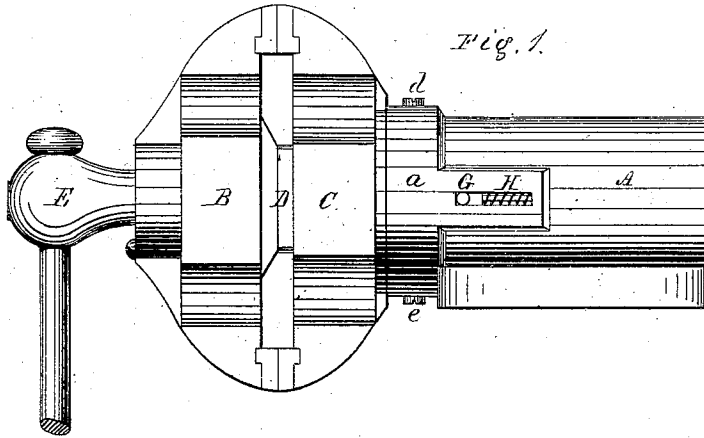


E. PARKER.

Vise.

No. 159,115.

Patented Jan. 26, 1875.



Witnesses.

Tyndall R. Curtis
John J. Peters

Inventor.

Edmund Parker
by Theo. G. Ellis Attorney

UNITED STATES PATENT OFFICE.

EDWARD PARKER, OF PLYMOUTH, ASSIGNOR TO ELMORE PENFIELD, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. 159,115, dated January 26, 1875; application filed November 16, 1874.

To all whom it may concern:

Be it known that I, EDWARD PARKER, of Plymouth, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Rotating Vises; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates to that class of vises in which the jaws can be turned to any angle in a vertical plane, and is also applicable to those which rotate both horizontally and vertically. My invention consists in a simple combination of the several parts relating to the vertical movement, by which a firm and strong vise is produced.

In the accompanying drawing, Figure 1 is a side view of my improved vise. Fig. 2 is a vertical section through the middle. Fig. 3 is a vertical cross-section on the line *xy*, looking toward the jaws. Fig. 4 is a vertical cross-section on the same line, looking toward the rear end of the vise.

A is the body or frame of the vise, which is formed in one solid piece of metal, with a flat bottom for bolting, in the usual manner, to a bench for use. B and C are the rotating jaws. They are shown double in the drawing, as they can be made of hard and soft metals for different purposes, and are readily reversible for use. The jaw B has a solid stem, D, of the form of cross-section shown in Figs. 3 and 4. It forms part of a circle on the top and bottom, to fit the interior surface of a cylindrical chamber in the body A, while its sides are flat when a part of the circle is cut away. This stem passes through an aperture in the jaw C, of the same form of cross-section as shown in Fig. 3, so that the two jaws rotate together, while the jaw C can slide back and forth upon the stem D without turning upon

it. Through the jaw B and the stem D passes the screw-bolt E, for opening and closing the jaws. The thread of this screw turns in a nut, F, forming part of the solid body A, which extends forward into the cylindrical interior, for the purpose as shown in Fig. 2, and forms an interior bearing for the jaw-stem D. A lip, *a*, upon the forward end of the body A, extends a short distance over the rear end of the jaw C, which is provided with a groove, *c*, in which the screws or pins *d e* traverse, and permit the jaw to turn freely, but retain it in place when the jaw B is drawn out by turning the screw E in the usual manner. Upon the side of the body A there is a bolt, G, pressed forward by a spring, H, arranged within a properly-constructed recess, and operated by a handle projecting through a slot, as shown in Fig. 1. The rear face of the jaw C, where it comes in contact with the body A on the section *xy*, is provided with a number of recesses, *g g*, &c., to fit the bolt G, which enters into one of them, and locks the vise at any desired angle. These recesses or bolt-holes are shown on the rear end of the jaw C in Fig. 3.

When it is desired to turn the jaws to any other angle than the one in which it is set, the bolt G is withdrawn by its handle, and allowed to spring into its proper socket, when the jaws are moved to the desired position.

I am aware that a cylindrical bearing in the fixed body or standard for the stem of the adjacent rotating jaw, and also that rotating jaws connected through the medium of the nut, are shown in the patent of Chas. Barnes, April 14, 1868, No. 76,584; but

I claim—

The solid body or standard A, having a cylindrical bearing for the stem of each of the rotating jaws B C, as shown, in combination with the nut F, screw E, and locking-bolt G, constructed and arranged as described.

EDWARD PARKER.

Witnesses:

THEO. G. ELLIS,

WENDELL R. CURTIS.