

H. P. Hood,

Vise.

N^o 54,352.

Patented May 1, 1866.

Fig. 1.

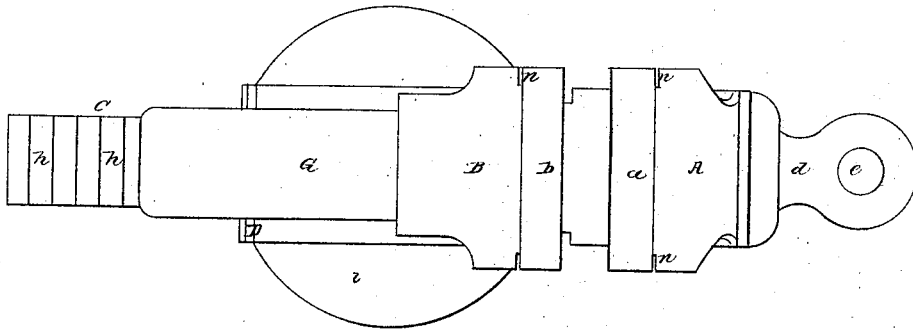


Fig. 2.

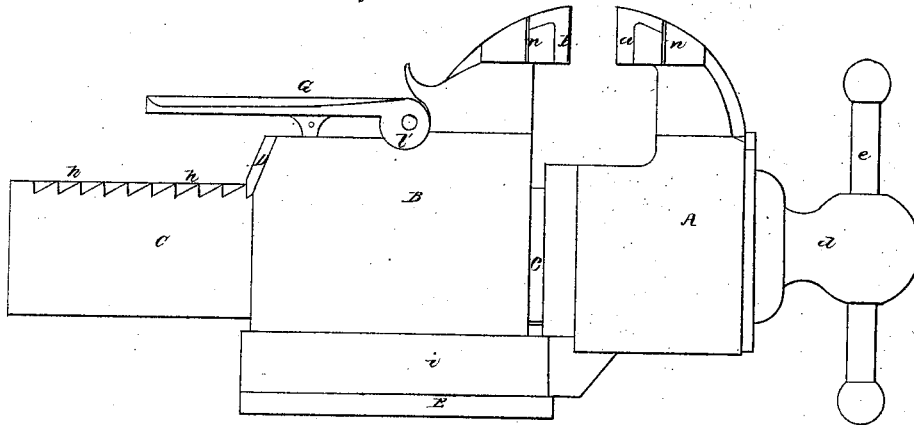
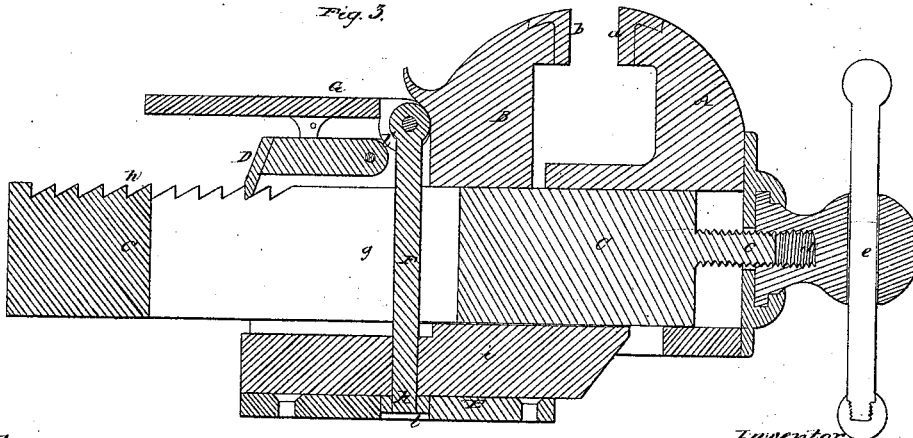


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

HARRISON P. HOOD, OF LOWELL, MASSACHUSETTS.

IMPROVED BENCH-VISE.

Specification forming part of Letters Patent No. 54,352, dated May 1, 1866.

To all whom it may concern:

Be it known that I, HARRISON P. HOOD, of Lowell, in the county of Middlesex and State of Massachusetts, have invented an Improved Bench-Vise; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it.

In the said drawings, A and B are two jaw-carriers, from which two jaws, *a b*, project, in manner as represented. One of these jaw-carriers—viz., that marked A—is fitted to, and so as to be capable of sliding longitudinally on, a bar, C. A screw, *c*, projects from the end of such bar and enters a screw-nut, *d*, so connected to the jaw-carrier as to be capable of being revolved therein, and when revolved to give motion to the jaw-carrier on and relatively to the bar C, in a manner to cause the jaw *a* to either approach toward or recede from the jaw *b*. A lever, *e*, goes transversely through the head of the nut, and serves to enable a person to revolve the nut.

The bar C slides freely through the other jaw-carrier, B, and has a long slot, *g*, made lengthwise in and vertically through it. It is also provided with a series of notches or teeth, as represented at *h*. A pawl, D, hinged to the jaw-carrier B, and arranged therewith in manner as represented in the drawings, operates with either of the notches of the series in which it may be placed, and therewith serves to engage the bar with the jaw-carrier.

The foot *i* of the jaw-carrier B is cylindrical, and rests on a cylindrical plate, E, provided with a series of holes, through which screws may be passed for fastening the plate to a bench. A spindle, F, passes up through the plate E, and has a head, *k*, at its lower end to rest in a socket, *l*, made in the plate. The said spindle goes up through the slot *g* and the carrier B, and is jointed to a cam-lever, G, arranged on the upper part of the carrier in manner as exhibited in Figs. 1, 2, and 3. By turning the lever down into a horizontal position its cam *l'* will clamp the carrier to its seat-

plate, so as to prevent the carrier from being revolved thereon.

Each jaw, *a* or *b*, is provided with two saw-kerfs or narrow notches, *n n*, which are arranged in it in manner as shown in Figs. 1 and 2. They are for the purpose of receiving the ends of metallic plates when applied to the inner faces of the jaws, such plates being bent around the jaws so as to project into the notches.

In revolving bench-vises as heretofore made the clamping mechanisms for fixing the rotary jaw-carrier in position have been arranged so as to extend, either in whole or in part, below the bench for receiving or supporting the vise. Consequently it has been more or less inconvenient of access for being put in operation. My arrangement of the clamping-lever relatively to the jaw-carrier and the spreader is a much better one, as by means of it the lever is not only in plain sight, but is more accessible. The said lever is provided with one or more projections or stops, *o o*, which extend from it or are arranged in manner as shown in Figs. 2 and 3. They determine the extent of depression of the lever, arresting it at such a position as will allow of the pawl being raised above the teeth of the bar when the jaw-carrier is clamped to the supporting-plate. On raising the pawl out of the rack or series of teeth the bar C may be easily moved lengthwise in the jaw-carrier B, so as to quickly move the jaw *a* either toward or away from the jaw *b*, the clamping of the jaws on an article placed between them being effected by turning the screw-nut on the screw.

I claim—

In the said improved bench-vise as made with the jaw-carriers A B applied to the bar C, as set forth, the arrangement of the clamping-lever on the jaw-carrier B, substantially as specified, the spindle being jointed to the said lever, and extended upward through the bar C and jaw-carrier, as explained.

HARRISON P. HOOD.

Witnesses:

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