

H. Wood,

Vise.

Nº 5,457.

Patented Feb. 22, 1848.

Fig: 1

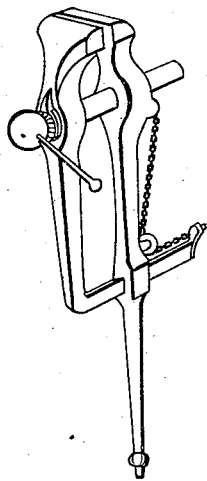
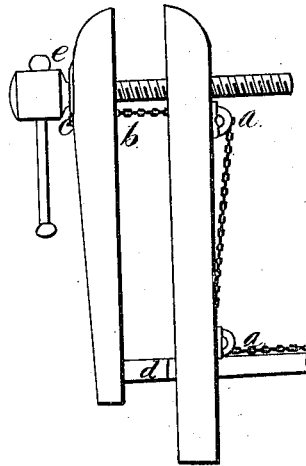


Fig: 2



Inventor:

Harve Wood

UNITED STATES PATENT OFFICE.

HORACE WOOD, OF TROY, NEW YORK.

BENCH-VISE.

Specification of Letters Patent No. 5,457, dated February 22, 1848.

To all whom it may concern:

Be it known that I, HORACE WOOD, of the city of Troy, in the county of Rensselaer and State of New York, have invented a
5 new and useful Improvement in the Article commonly known as the "Bench-Vise"; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in
10 the application of a chain to the upright vise whether made of wood or iron, so as to cause a parallel motion to the front jaw and secure nearly the full power of the screw upon the article to be held.

15 To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

I construct my vise in the usual form as may be seen in the accompanying drawings.

20 Figure 1, is a perspective view of an iron vise and Fig. 2, is a side view of a wooden vise.

In order to get a parallel motion I attach a common straight linked tiller chain
25 to the front jaw close under the screw at C, Fig. 2, (as shown in the accompanying drawings) and run the chain *b*, parallel with the screw through the back jaw down and out to the end of slide bar *d*, and fasten
30 to the same by a hook turned through the end link, the chain turning two angles around two pulleys *a, a*, that are attached to the back jaw one close under the screw and the other close to the top of slide bar, and
35 in order to make the upper end of front

jaw to move out with the screw I make or attach to the head of the screw a washer and fasten to the jaw a cap or lip *e* that will project over the washer. Thus it will be seen
40 that by moving out the screw that the distance occupied by the upper horizontal part of the chain must be increased and in consequence the distance occupied by the lower horizontal part of the chain must be diminished causing lower end of the jaw to
45 move out with the upper end thus giving a uniform motion to the front jaw. It will be seen also that the power to it at the lower end of the common vise is a direct draft on the chain in consequence of which the full
50 power of the screw is forced upon the article held except the friction of the pulleys.

What I claim as my invention and desire to secure by Letters Patent is—

Obtaining a parallel motion to the front
55 jaw of upright bench vises whether of wood or iron by attaching a chain (or any other article which shall answer the purpose) to the front jaw close under the screw and running it parallel with the screw through the
60 back jaw turning over a pulley. Down the back jaw to the slide bar and around a second pulley from thence parallel with slide bar to the end and attaching it with a hook or otherwise to the end of said bar for the
65 purpose and in the manner herein described.

HORACE WOOD.

Witnesses:

JACOB DATER,
JOHN KNAPP.