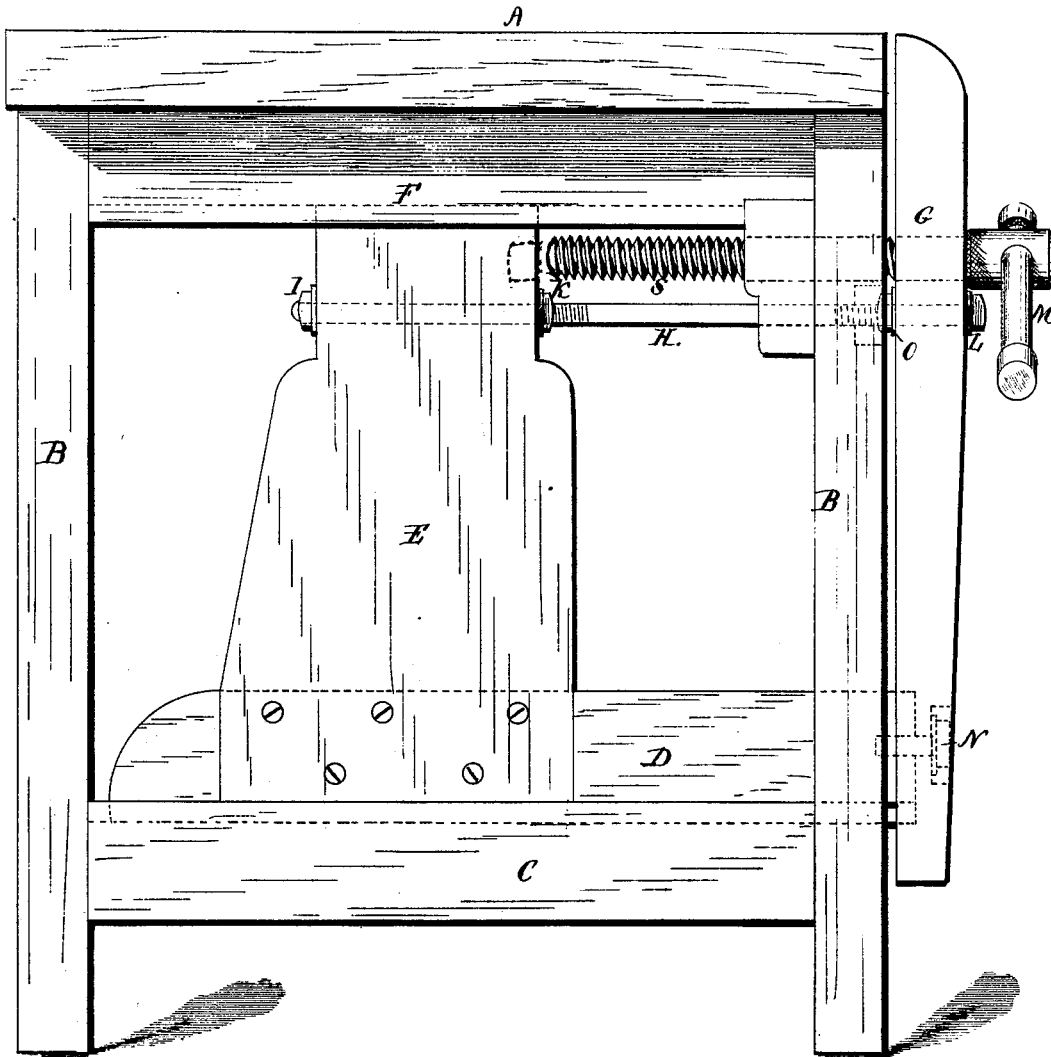


A. P. THOMPSON.
Bench-Vise.

No. 200,848.

Patented March 5, 1878.



Witnesses.
L. W. Latimer,
A. S. Williams

Inventor.
A. P. Thompson
by J. H. Adams. atty.

UNITED STATES PATENT OFFICE.

ACTOR P. THOMPSON, OF MONMOUTH, MAINE, ASSIGNOR TO DANIEL P. BOYNTON, OF SAME PLACE.

IMPROVEMENT IN BENCH-VISES.

Specification forming part of Letters Patent No. **200,848**, dated March 5, 1878; application filed December 19, 1877.

To all whom it may concern:

Be it known that I, ACTOR P. THOMPSON, of Monmouth, in the county of Kennebec and State of Maine, have invented an Improved Bench-Vise, of which the following is a specification:

My invention relates to an improvement in vises which are used in connection with cabinet-makers' and other work-benches; and the object of the invention is to insure a perfect and rigid parallelism of the movable jaw with the face of the bench or the back jaw of the vise.

The invention consists in the employment of a movable frame or carriage in connection with the ordinary screw and movable jaw, and operating in such a manner that the said jaw will preserve a rigid parallelism with the face or front of the bench or the back jaw of the vise, in connection with an adjustable screw-rod which is attached at one end by means of nuts at the front and rear side of the movable jaw, and, passing through the front of the bench or the back jaw, is attached at the other end to the upright of the movable frame by means of nuts on the front and rear edges of the same, so that the jaw can be adjusted to be perfectly parallel with the front of the bench or the back jaw; or it may be set at an angle with the same, if desired.

The accompanying drawing is a side elevation of a bench embodying my improvements.

A represents the top of the bench. B B C F are the supports and cross-bars of the same, constituting the frame. G is the movable jaw, through which passes the screw S, in the usual manner, and operated by the lever or handle M.

To the lower end of the jaw G is attached a bar, D, which passes through the front of the frame B, and is provided with a tongue that is fitted in a groove in the lower cross-piece C, so as to move freely in the same.

To the sliding bar D is rigidly attached an

upright, E, on the upper end of which is a tongue or tenon that moves in a groove in the upper portion F of the frame.

Below the screw S is a metal rod, H, which passes through the upper portion of the upright E, and is provided with nuts I K at the front and rear edges of the upright, which fit on a thread cut on the rod H, and thus enable the latter to be adjusted longitudinally in the upright E. The rod H passes through the front of the frame, and is attached to the jaw G by means of adjusting-nuts L O on the threaded end of the rod H, on the front and rear sides of the jaw G.

The peculiar construction and arrangement of the carriage or movable frame F E D will give to the jaw G, as will be seen, a very rigid and steady bearing; and by means of the adjustability of the screw-rod H, any want of parallelism occasioned by a severe strain or by constant use could be readily and easily remedied; or the movable jaw may, by the same devices, be set at an angle with the rear jaw or face of the bench, if necessary.

The jaws of the vise may extend above the level of the bench, if desirable; and the vise, with its attachments, may be made wholly or in part of wood or metal, as required.

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

The combination of the sliding carriage E D and frame F B C, the adjusting screw-rod H, and the movable jaw G and screw S, all arranged and operating as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ACTOR P. THOMPSON.

Witnesses:

GEO. L. DODD,
O. F. FROST.