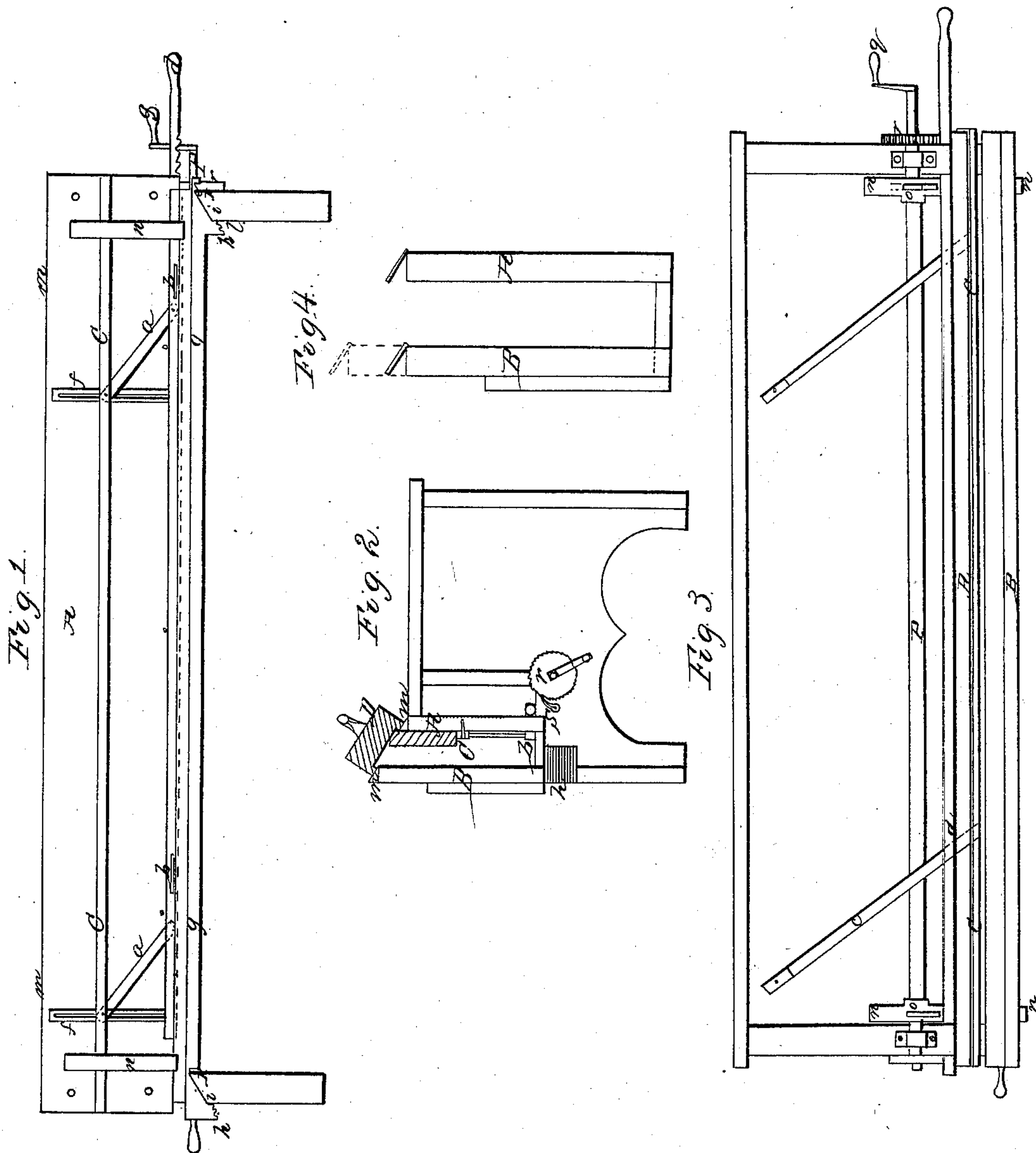


*J. Deroge,  
Work Bench.*

*N<sup>o</sup> 21,247.*

*Patented Aug. 24, 1858.*





# UNITED STATES PATENT OFFICE.

JUSTIN DEVOGE, OF RANDOLPH, PENNSYLVANIA.

## CARPENTER'S WORK-BENCH.

Specification of Letters Patent No. 21,247, dated August 24, 1858.

*To all whom it may concern:*

Be it known that I, JUSTIN DEVOGE, of Randolph, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Bench-Clamps for Carpenters' Benches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1, represents a side elevation of a carpenter's bench with my improved clamp attached. Fig. 2 represents an end elevation of the same. Fig. 3, represents a plan of the same with the top of the bench removed in order to show the arrangement of the clamping mechanism. Fig. 4, represents an end elevation of the jaws of the clamp showing a modification in the plan of adjusting the bevel boards for different bevels.

The object of my invention is to facilitate the process of planing the edge of the board to a true and uniform bevel, when held between the jaws of the clamp.

My invention for effecting this object consists, first, in making the jaws of the clamp the guides for the inclination of the cutting instrument used to remove the surplus material from the edge of a board, in order to bring it to any given angle of bevel, by constructing one of the jaws of the clamp so that it can be raised or depressed, in order that the difference in the bevel of the jaws may coincide with the slope of the bevel to be given to the board, and thus form a guide on each side of the board to regulate the inclination of the cutting instrument. Second, combining with the jaws of the clamp, beveled boards whose angle of inclination corresponds with the bevel to be given to the board, thus forming a seat for the ribs on the sole of the plane, thereby insuring giving to the board a uniform and true bevel the entire length.

In the accompanying drawings is represented a carpenter's bench with my improved clamp attached. This clamp consists of two jaws (A, B) extending the whole length of the bench. The one (A) is stationary and forms the side to the bench and the other (B) is movable. Between these two jaws is an adjustable rest (C) for the board while being edged, which regulates the height it projects above the jaws and gages the amount to be taken off to bring it to a uniform width throughout.

Two parallel links (a) are pivoted at one end to the rest (and this end of the link moves in guides (f) to prevent the rest moving laterally when raised or depressed); and at the opposite end to a sliding bar (b). A pair of secondary horizontal links (c) pivoted to a girt or shelf uniting the ends of the bench, pass through slots in an adjusting bar (d) and enter slots in the sliding bar (b). The adjusting bar (d) has on its under side notches which catch on a plate at the end of the table and hold it in position when drawn out or pushed in to raise or depress the rest. An operating handle may be attached directly to the sliding bar (b) and give motion to it without the aid of intermediate links. The end of the rest may also be provided with an index pointer, and one end of the stationary jaw graduated, over which graduation the index passes when the rest is moved, thus showing the exact distance the rest is below the top of the stationary jaw.

The movable jaw (B) rests on a slide (g) with wedge shaped projections (h), and a sloping step (i) in the projecting ends of the bench forms a bed for the wedges. Notches (Z) are cut in the under side of the wedges into which a projection or pin (k) in the step enters and holds the wedge from slipping back as it is drawn endwise to elevate the movable jaw.

Both jaws of the clamp are provided with movable bevel boards (m) which are used when desired to joint the board to a beveled edge. Clamps (n) pass through both jaws and are turned up at their outer ends and bear against the movable jaw. These clamps are slotted on their inner end to receive cams (o) which are attached to a shaft (p) that is turned to open or close the clamps by a handle (q) at the end of the bench and a ratchet wheel (r) on the cam shaft, into which a dog (s) catches, holds the cams from turning when the movable jaw clamps the board.

A plane (D) with guards at the outer edge of the sole is used with this clamp for jointing boards. The board is placed between jaws and elevated by the rest to the height required to finish it to a given width and bevel boards of the proper slope are placed on the upper edge of both jaws, and the movable jaws raised until the faces of both bevel boards are in the same plane. Thus it will be seen that the jaws form



guides which regulate the inclination of the cutting instrument, as required to form any angle of bevel, while the bevel boards form a broad guide to the sole of the plane and insure accuracy and uniformity in the bevel throughout the entire length of the board being edged.

I do not confine myself to the description of bevel boards described, as adjustable plates (as seen in Fig. 4) may be substituted in their place, which are hinged to the edge of the jaws, so that they may be elevated or depressed to bring them in the plane passing through the outer edge of the stationary jaw and the inner edge of the movable jaw, when the latter is adjusted to any required bevel to be given to the board, thus forming a bed to the sole of the plane.

Having thus described my improvements

in bench clamps what I claim therein as new and desire to secure by Letters Patent is—

1. In regulating the inclination of the cutting instrument to the angle required to give to the edge of a board a given bevel, by raising or lowering one of the jaws of the clamp between which the board is held, substantially as described, or in an equivalent manner.

2. Combination of the bevel boards, arranged as described, with the jaws of the clamp for the purpose set forth.

In testimony whereof I have subscribed my name.

JUSTIN DEVOGE.

Witnesses:

JOHNS HOLLINGSHEAD,  
JOHN M. MAUKIN.