

(No Model.)

J. AICHNER.
CARPENTER'S VISE.

No. 504,856.

Patented Sept. 12, 1893.

Fig: 1.

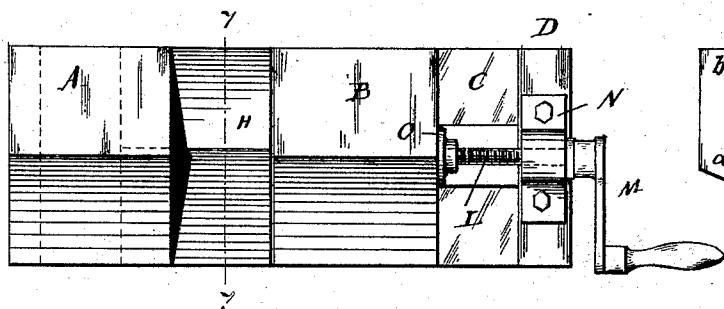


Fig: 2.

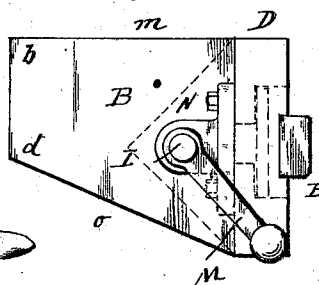


Fig: 3.

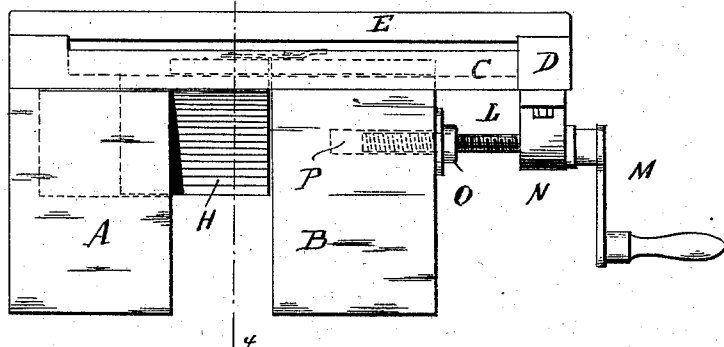


Fig: 4.

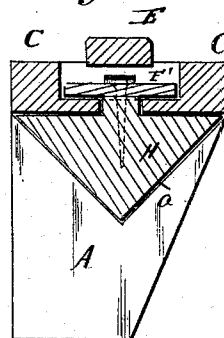


Fig: 5.

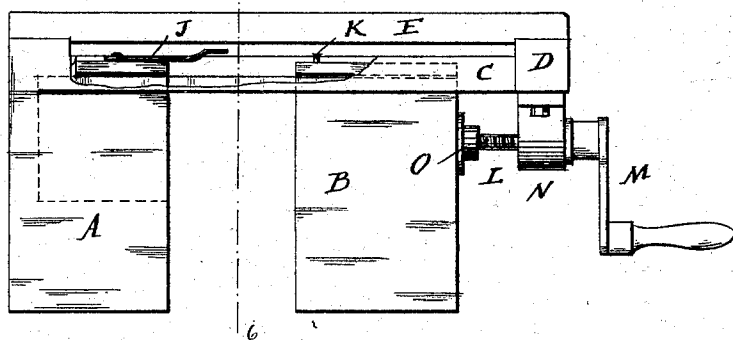


Fig: 6.

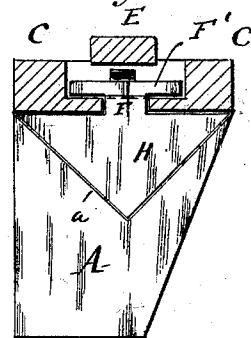
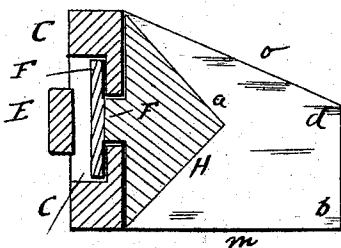


Fig: 7.



WITNESSES:

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CARPENTER'S VISE.

SPECIFICATION forming part of Letters Patent No. 504,856, dated September 12, 1893.

Application filed May 2, 1893. Serial No. 472,807. (No model.)

To all whom it may concern:

Be it known that I, JOHANN AICHNER, a citizen of Germany, and a resident of the city of Brooklyn, in the county of Kings, State of New York, have invented certain new and useful Improvements in Carpenters' Vises, of which the following is a specification.

The object of my invention is to provide a new and improved carpenter's vise for holding pieces of wood while planing their ends, either at right-angles to the edges or at an obtuse or acute angle.

The invention consists in the combination with a fixed jaw, of guide-bars secured to the same, a movable jaw mounted on said guide-bars, means for moving said movable jaw, a beveled piece mounted to move on the guide-bars and to pass into a recess in the fixed jaw and means for coupling said beveled piece to the movable jaw.

The invention also consists in the construction and combination of parts and details, which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a front-view of my improved carpenter's vise. Fig. 2 is an end-view of the same. Fig. 3 is a plan-view, with the beveled piece drawn out. Fig. 4 is a transverse sectional view, on the line 4 4, of Fig. 3. Fig. 5 is a plan view, the beveled piece being within the fixed jaw. Fig. 6 is a transverse sectional view, on the line 6 6, of Fig. 5, and Fig. 7 is a transverse sectional view, on the line 7 7, of Fig. 1, showing the vise reversed.

Similar letters of reference indicate corresponding parts.

The vise is constructed with the fixed jaw A and the movable jaw B. To the rear of the fixed jaw A two guide-bars C are fastened, which are L-shaped in cross-section and which are connected at the ends opposite the ones fastened to the jaw A by a cross-piece D. A brace-bar E is fastened to the cross-piece D and to the back of the fixed jaw. The movable jaw B is suitably guided on the guide-bars C. The fixed jaw A is provided in its inner side with a triangular recess *a*, shown in dotted lines in Figs. 3 and 5 and in full lines in Figs. 4 and 6. A sliding triangular or beveled piece H of the same height as the jaws A and B is arranged between the same

and is of such size and such depth that it can pass into the recess *a* and fit snugly in the same. Said beveled piece H is provided with an extension F passing through the slot between the guide-bars C, on which extension a cross-piece F' is formed, for the purpose of guiding said beveled piece H on the guide-bars C. A spring catch J is fastened on the back of the beveled piece H and is adapted to engage a pin K projecting from the back of the movable jaw B. A screw-spindle L provided with a crank-handle M is mounted to turn in a bearing N on the cross-piece D, which spindle L is screwed through a nut O on the end of the jaw B and can pass into an aperture P in said jaw B, as shown in dotted lines in Fig. 3. The tops of the jaws A and B are at right-angles to the front of the jaws, as shown at *b*, Fig. 2, and the bottom of the jaws is at an angle of twenty-two and one-half degrees to the front of the jaws, as shown at *d*, Fig. 2. The two sides of the beveled piece H are at right-angles to each other and each at an angle of forty-five degrees to a plane parallel with the front of the jaws.

The device is used in the following manner: The same is clamped to an ordinary carpenter's work-bench in such a manner that the top *m* is parallel with the top of the bench. If a bevel of forty-five degrees is to be cut, the movable jaw B is moved a greater or less distance from the fixed jaw, to permit of inserting the piece to be cut, which piece rests on the top of the beveled piece H. The projecting part is then planed off flush with the surface *m*. If the piece is to be cut off at right-angles, the movable jaw B is moved against the jaw A and the spring-catch J is raised so as to disengage it from the pin K, whereby the beveled piece H is unlocked from the movable jaw B. If now the jaw B is moved from the jaw A the beveled piece H remains in the recess *a* of the fixed jaw A, as shown in Fig. 6, and the piece to be cut off can be placed between the jaws A and B. The piece can then be cut off at right-angles by planing along the tops *m* of the jaws. In order to cut bevels of twenty-two and one-half degrees and sixty-seven and one-half degrees, the vise is reversed, so that the inclined face *o* is at the top and is also clamped in the jaws of a carpenter's work-bench. If a bevel of

twenty-two and one-half degrees is desired, the beveled piece H remains in the recess *a* of the fixed jaw A and the board is clamped between the fixed and movable jaws and is cut off along the inclined face *o* of the vise, which is at an angle of twenty-two and one-half degrees to the front of the jaws C. In case the piece is to be cut at an angle of sixty-seven and one-half degrees, the beveled piece H is locked to the movable jaw B so as to be withdrawn from the recess *a*. The board to be cut at an angle of sixty-seven and one-half degrees is then placed on the upper surface of the beveled piece H and the projecting part is cut off flush with the inclined face *a* of the jaws A and B.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a carpenter's vise, the combination with a fixed jaw, of guide-bars secured to the same, a movable jaw mounted to slide on said guide-tracks, and means for moving said movable jaw, one surface of said jaws being at right-angles to the fronts of the jaws and the other face at an angle of twenty-two and one-twentieth degrees, and a beveled movable

piece mounted on the guide-bars, substantially as set forth.

2. In a carpenter's vise, the combination with a fixed jaw having a recess in its inner face, of guide-bars attached to said fixed jaw, a sliding jaw mounted on the guide-bars, means for moving said sliding jaw, a beveled piece mounted to slide on said guide-bars and to pass into the recess in the fixed jaw, substantially as set forth.

3. In a carpenter's vise, the combination with a fixed jaw provided in its inner face with a recess, of guide-bars secured to said fixed jaw, a movable jaw on said guide-bars, means for moving said jaw, a beveled piece mounted to travel on said guide-bars and to pass into the recess in the fixed jaw and means for coupling said beveled piece to the movable jaw, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOHANN AICHNER.

Witnesses:

OSCAR F. GUNZ,

H. WILLARD GRIFFITHS.