

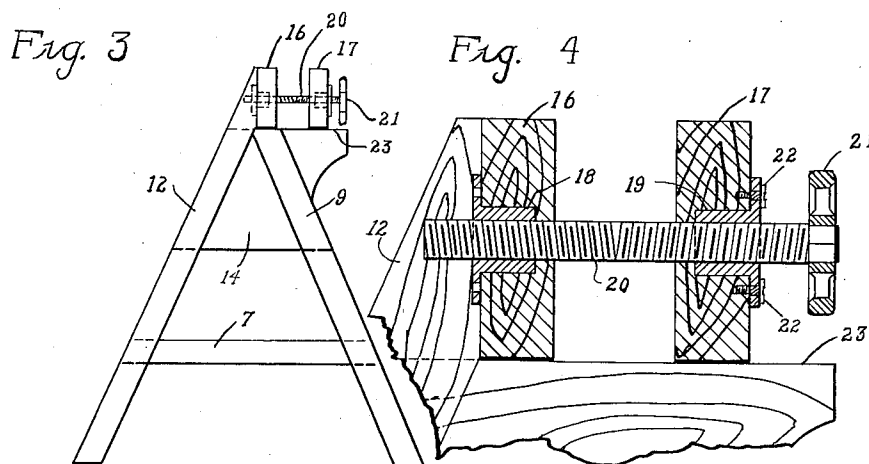
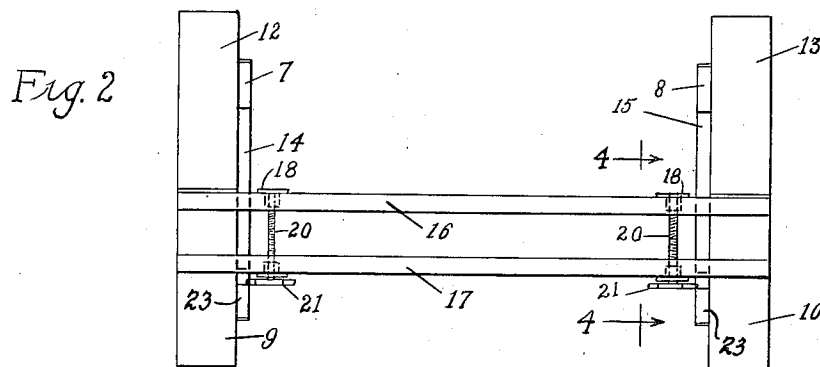
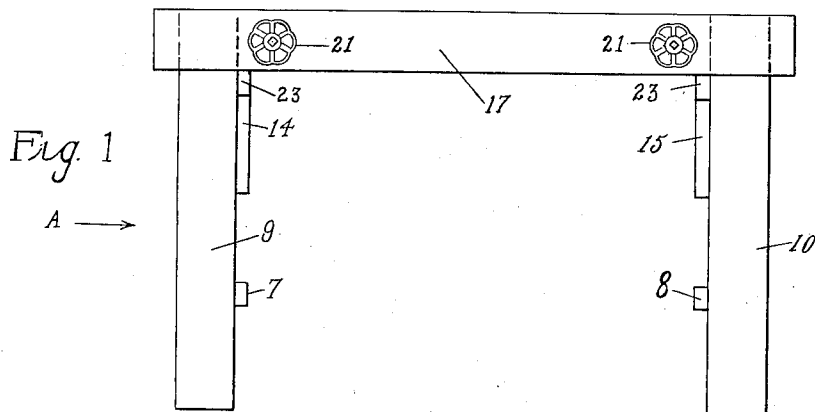
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WISE

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VISE

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3 Claims. (Cl. 81—41)

My invention relates to a vise, and more particularly to a sawhorse vise. A principal object of the invention is to provide a clamping device of such character as to materially reduce the time factor of carpenters and allied artisans.

Another object is to provide a simple and convenient means whereby material, such as wood, may be held firmly in place facilitating the shaping and required operations upon such material.

Still another object is to provide a clamping means or vise without obstruction below the jaws, other than the relatively narrow planes of suspension of the jaws.

A further object is to provide a clamping means or vise with wide jaws.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description.

In the drawing, like reference characters designate similar parts in the several views.

Figure 1 is a front elevation showing an embodiment of my invention.

Figure 2 is a plan or top view of the entire assembly.

Figure 3 is an end view, looking in the direction of the arrow A of Figure 1.

Figure 4 is an enlarged section, taken on the line 4—4 of Figure 2, looking in the direction of the arrows.

Referring more in detail to the drawing, the reference numerals 9 and 10 designate front legs and 12 and 13 designate rear legs. The legs provide the desired elevation and support for the assembly. Tie bars 7 and 8 are attached to the front and rear legs to hold them in a rigid position and prevent their spreading. End gussets 14 and 15 are also attached to the legs and serve a similar purpose. The rear pair of legs 12 and 13 extend above the front pair of legs 9 and 10.

A beam 16 serves as the rear of stationary jaw of the clamping means and is mounted upon the shorter front legs 9 and 10 and is attached to that portion of the rear legs that extends above the front legs. A beam 17 serves as the front, movable jaw. Near each end of the jaws 16 and 17 are inserted special threaded adjustment nuts 18 with right-hand threads and 19 with left-hand threads. They are inserted in holes in the jaws provided for that purpose and are then fastened securely to the jaws by small screws 22 through holes in the heads of the nuts 18 and 19. The screws 22 are screwed into the jaws 16 and 17. Two adjusting bolts 20, having right-hand threads on one end and left-hand threads on the other

end engage and operate within the adjustment nuts 18 and 19. To the front ends of the adjustment bolts 20 are fastened hand wheels 21 for manipulation of the bolts.

The gussets 14 and 15 have shelf or shoulder members 23 that project forwardly of the device, to provide supports upon which the beam 17 slides laterally. As shown, the shelves or shoulders 23 support the beam 17 adjacent the ends thereof.

In the use and operation of this invention, the material, which is to be held firmly while the artisan processes it, is placed between the jaws 16 and 17. The adjustment hand wheels 21 are then turned, causing the adjustment bolts 20 to turn. The turning of the adjustment bolts 20 in a clockwise direction causes the adjustment nuts 18 and 19 to recede on the adjusting bolts, forcing the front jaw 17 to proceed in a forwardly direction on and supported by the gussets 15. The rear jaw 16, being fastened to the rear legs 13, does not move, and thus the movement of the front jaw 17 is doubled in speed. The material is thus compressed between the jaws 16 and 17 sufficiently to hold the same rigidly in place.

It will be apparent that having right-hand threads covering one half the length of the adjustment bolts 20 and left-hand threads on the other half doubles the speed with which material can be placed in this clamping device and hence this factor enhances the efficiency of the invention.

It should be noted that the only obstructions below the clamping jaws 16 and 17 are the gussets 15 and their shelf or shoulder members 23, and thus material or objects in the device may protrude between the jaws to the floor or platform on which the entire assembly rests.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications which may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a vise, a sawhorse frame, a relatively stationary jaw mounted on the frame, shelf means arranged at the ends of the frame and extending outwardly therefrom, a movable jaw spanning the space between the shelf means and providing an open bottom between the shelf means and between the jaws, the movable jaw being laterally

slidable on the shelf means, and means to slide the movable jaw laterally on the shelf means.

2. In a vise, a sawhorse frame, a relatively stationary jaw mounted on the frame, shelf means
5 arranged at the ends of the frame and extending outwardly therefrom, a movable jaw spanning the space between the shelf means and providing an open bottom between the shelf means and between the jaws, the movable jaw being laterally
10 slidable on the shelf means, and right and left hand threaded bolts connected with the jaws to move the movable jaw laterally on the shelf means, the bolts being spaced apart to maintain at least substantially the open bottom for the vise.

3. In a vise, a sawhorse frame having two pairs of legs, the pair of legs at one side extending above the pair of legs at the other side, a relatively stationary jaw mounted upon the shorter pair of legs and fixedly arranged against the portions of the other pair of legs that extend above the shorter pair of legs, bracing means for the frame extending outwardly from the shorter pair of legs to provide shelf means, a movable jaw laterally slidable on the shelf means, and means
10 to slide the movable jaw laterally on the shelf means.

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