O. S. PETTERSON.

VISE.

APPLICATION FILED SEPT. 25, 1920.

1,418,733. Patented June 6, 1922.

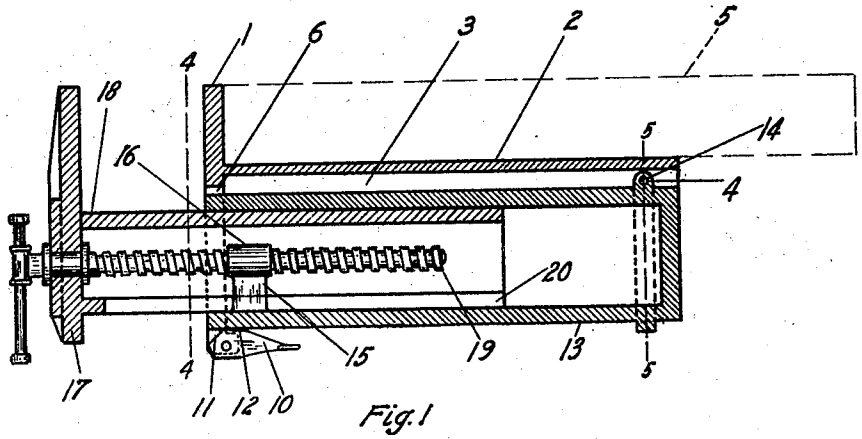


Fig. 1

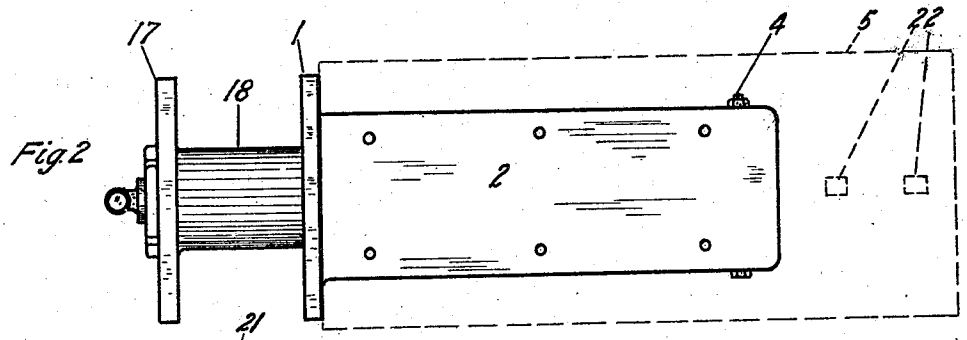


Fig. 2

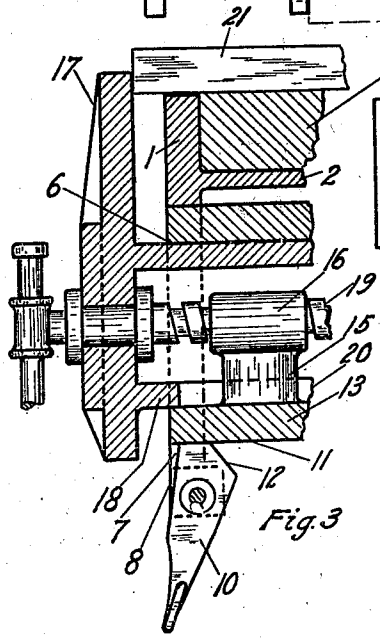


Fig. 3

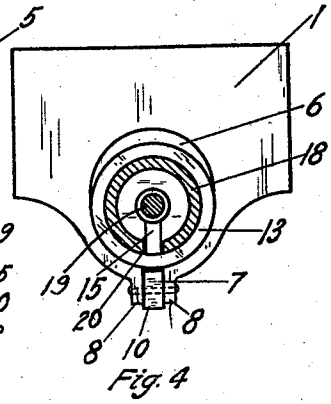


Fig. 4

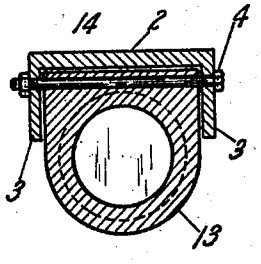


Fig. 5

INVENTOR.

Olof S. Petterson

BY

ATTORNEY.

UNITED STATES PATENT OFFICE.

OLAF S. PETTERSON, OF DENVER, COLORADO.

VISE.

1,418,733. Specification of Letters Patent. Patented June 6, 1922.

Application filed September 25, 1920. Serial No. 412,749.

To all whom it may concern:

Be it known that I, OLAF S. PETTERSON, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented new and useful Improvements in Vises, of which the following is a specification.

The present invention is directed to improvements in vises, and more particularly to those used by carpenters and cabinet-makers.

The invention has for its primary object to provide a vise of this nature so constructed that the outer jaw thereof can be easily and quickly elevated above the plane of the work bench to co-operate with the usual stops of the bench to hold the material being worked upon in its proper position for finishing.

Heretofore, stops have removably mounted on the outer jaws of vises of this type, and co-operated with the usual bench stops to hold the work, and when these stops were in place, and not in use they were in the way of the workman, whereas in the present invention the outer jaw can be raised to act as a stop, and quickly lowered when not in use.

With these and other objects in view, this invention resides in the novel features of construction, formation, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated.

An embodiment of the invention that is considered the preferable one, is illustrated in the accompanying drawing, wherein:—

Figure 1 is a longitudinal sectional view through the device, the bench being shown in dotted lines, and the jaws in their normal position.

Figure 2 is a top plan view of the same.

Figure 3 is a fragmentary longitudinal sectional view showing the outer jaw raised to constitute a stop.

Figure 4 is a sectional view on line 4—4 of Fig. 1.

Figure 5 is a sectional view on line 5—5 of Fig. 1.

The vise comprises an inner jaw 1, and formed integral therewith is a plate 2, the sides of which terminate in downwardly depending flanges 3, which support the transverse bolt 4, the purpose of which will appear later. Any suitable means may be employed for securing the plate 2 to the under surface of the bench 5.

The jaw 1 is formed with an opening 6, the lower wall of which is formed with a slot 7 and resultant ears 8. A pin 9 is supported by the ears 8 and pivotally mounted in the slot and upon the pin is a cam lever 10, said lever having its head formed with flat faces 11 and 12, the purpose of which will later appear.

A barrel 13 is employed, and has its inner end provided with a transverse bore 14 for engaging the bolt 4, whereby said barrel is pivotally supported between the flanges 3 at its rear end, while the forward end of said barrel is movable vertically in the opening 6 of the jaw 1, as clearly shown in Fig. 5 of the drawing. Fixed interiorly of the barrel 13, and adjacent its forward end, is a post 15, said post having a head 16, the purpose of which will appear later.

The outer jaw 17 has formed integral therewith a tube 18 which is slidably mounted in the barrel 13, said jaw having rotatably connected thereto the feed screw 19 of conventional form, which is in threaded engagement with the head 16 of the post 15 in the usual manner.

The tube 18 is provided with a longitudinal slot 20 for accommodating the post 15, whereby the tube may slide within the barrel when the feed screw 19 is rotated to move the jaws 1 and 17 towards or away from each other, as desired.

It is obvious that when the lever 10 is swung from the position shown in Fig. 1, that the face 12 will disengage said tube 18 and the face 11 will engage the tube, thereby swinging the upper edge of the jaw 17 above the plane of the upper edge of the jaw 1, and as shown in Fig. 3 of the drawing. This is readily accomplished since the head of the lever 10 is at all time in contact with the tube 13, and when the tube is raised a sufficient distance it constitutes a stop. Thus the work 21 will be held against moving in one direction by the jaw 17 and in the other direction by the usual stops which are detachably engaged in the sockets 21 of the bench 5.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction, may be resorted to without departing

from the spirit or sacrificing any of the advantages of the invention.

What is claimed is:—

1. A vise of the class described, comprising a barrel, means for pivotally connecting the barrel with a bench, an outer jaw adjustably associated with the barrel, an inner jaw fixed to the bench, and means carried by the inner jaw for swinging the barrel and associated jaw vertically, as and for the purpose set for.

2. A vise of the class described, comprising inner and outer jaws, means for pivotally supporting the outer jaw on a bench, and means carried by the inner jaw for moving the outer jaw vertically.

3. A vise of the class described, comprising a plate for attachment to a bench, a barrel pivotally connected with the plate, a tube slidably mounted in the barrel and having a jaw carried thereby, a second jaw fixed to the bench, a lever pivotally supported by the second named jaw, and having faces for engaging the barrel to raise or lower the outer end thereof to move the first named jaw vertically, as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OLAF S. PETTERSON.

Witnesses:

THOMAS PEARCE,

OTTO F. THUM.