June 4, 1929. T. S. SMITH ET AL 1,715,722

DOOR SUPPORTING VISE

Filed Nov. 23, 1927

Fig. 1.

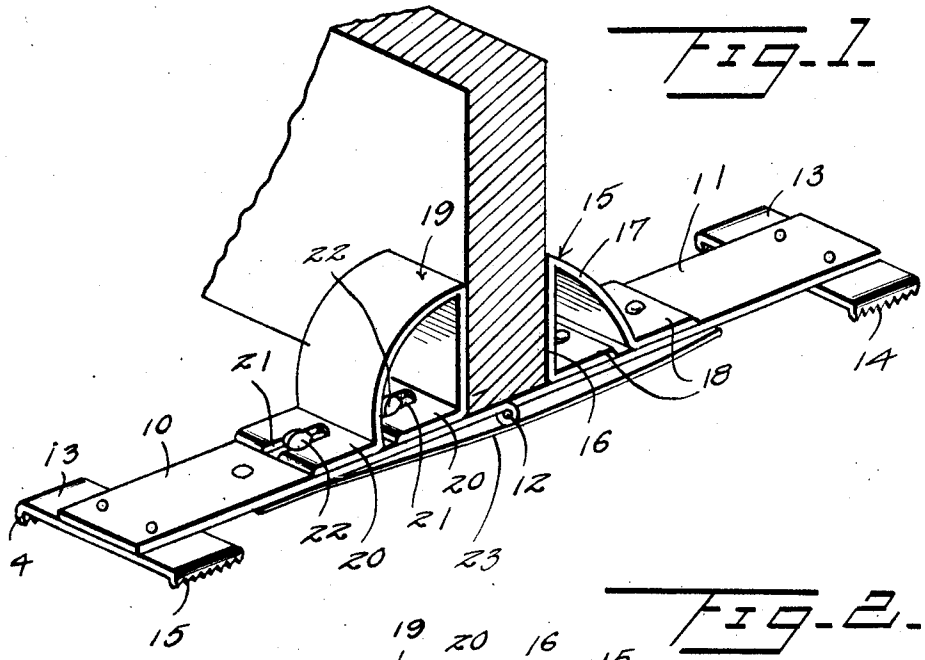


Fig. 2.

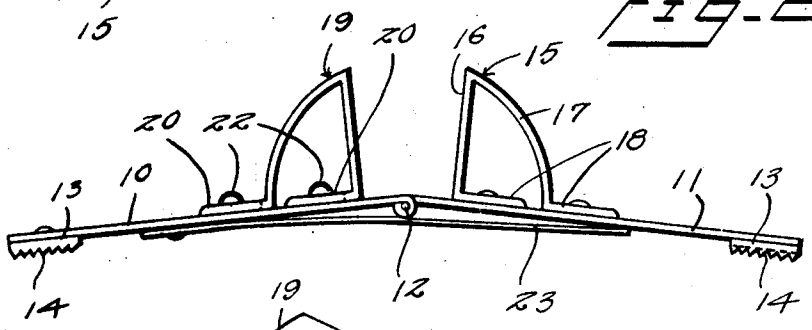
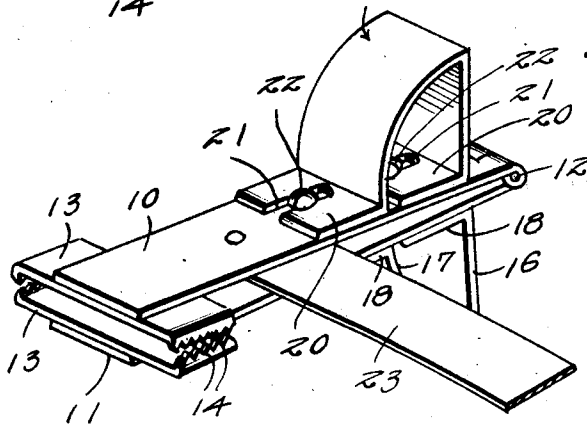


Fig. 3.



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UNITED STATES PATENT OFFICE.

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DOOR-SUPPORTING VISE.

Application filed November 23, 1927. Serial No. 235,293.

This invention relates to new and useful improvements in supporting devices, and particularly to devices for supporting doors, window sashes, and the like, while working upon same.

One object of the invention is to provide a device of this character which is simple in construction, and which will properly support a door while fitting hinges thereto.

Another object is to provide a device of this character which can be conveniently folded, so as to occupy a small space when placed in a tool box.

Another object is to provide a device of this character wherein the door gripping jaws automatically open to facilitate the introduction of the edge of a door, and wherein the weight of the door causes the jaws to grip the door.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing:

Figure 1 is a perspective view of the vise, in connection with a portion of a door supported thereby.

Figure 2 is a side elevation of the device before a door is placed therein, to show the action of the spring.

Figure 3 is a perspective view of the device in folded position.

Referring particularly to the accompanying drawing, 10 and 11 represent a pair of flat metal strips which are hingedly connected together, at their ends, as shown at 12. Secured to the other end of each of the strips, and extending transversely thereof, is a metal plate 13, each having its ends turned downwardly and serrated, as at 14, for biting engagement with a floor, whereby to prevent slipping of the device, when in use. Secured to the upper face of the strip 11 is the jaw member 15, which is formed from a single piece of metal bent to provide a vertical door engaging portion 16, a bracing portion, as at 17, and the attaching feet 18. This jaw member is disposed adjacent the hinge, as clearly shown in the drawing. At the other side of the hinge, and mounted on the strip 10, is a second jaw member 19, formed similarly to the member 15, except that the attaching feet 20 are formed with the slots 21, which receive bolts or screws 22, and which bolts or screws enter the strip, whereby to permit adjustment of the jaw 19 toward and away from the jaw 15, for the purpose of accommodating doors of different thicknesses therebetween. Pivotally connected to the lower face of the strip 10, at a suitable distance from the hinge, and arranged to be swung to extend transversely of the said hinge, is a leaf spring 23, the intermediate portion of which is slightly elevated so as to bear against the lower side of the hinge and cause said hinge to move upwardly, with the result that the strips 10 and 11 will be upwardly tilted, and the jaws 15 and 19 spread apart. This provides for the easy introduction of the edge of the door between the jaws, and obviates any hand adjustments.

It will readily be understood, upon reference to Figure 1, of the drawing, that the door will be properly held between the jaws, so as to permit work being done on the door, such as cutting mortises for the hinges, or for the lock. Furthermore, the serrated feet prevent the device slipping on the floor, so that the door remains in one place. Window sashes may also be held in this device, and work performed on them.

When not in use, the operator swings the spring 23 outwardly, from beneath the strips 10 and 11, and then folds the strips downwardly until they come into contact with each other. The device may then be placed in a tool box, and occupy a small amount of space.

What is claimed is:

A door supporting vise comprising a pair of hinged strips, a vise jaw fixed on one of the strips adjacent the hinge connection of the strips, a vise jaw mounted on the other strip adjacent the hinge connection of the strips and adjustable toward and away from the first jaw, and a leaf spring pivotally connected to one of the said strips to swing out laterally thereof, at times, or in line therewith, at times, to extend across the hinge connection and said other strip and normally exerting an upward force on the hinged ends of the strips whereby to hold the vise jaws apart to facilitate the introduction of the edge of a door between said jaws.

In testimony whereof, we affix our signatures.

THOMAS S. SMITH.
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