Jan. 5, 1926. 1,568,563

A. MADER

VISE

Filed Feb. 26, 1925

Fig. 1

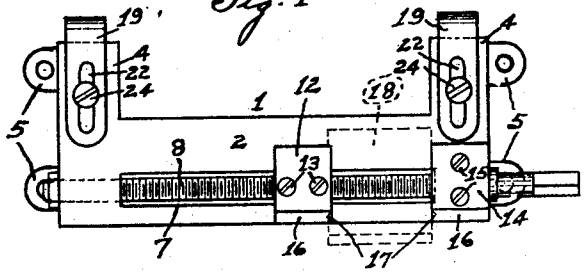


Fig. 2

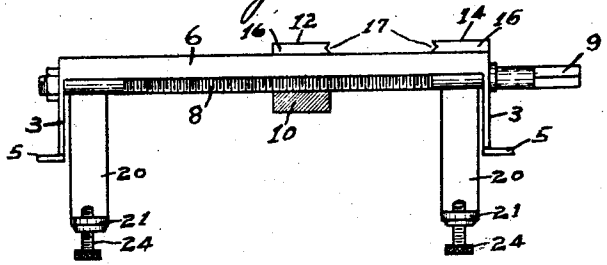


Fig. 3

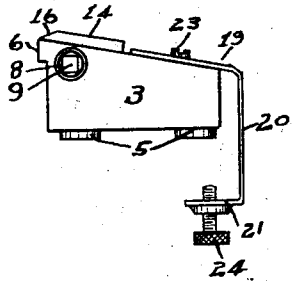


Fig. 4

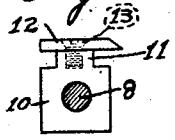
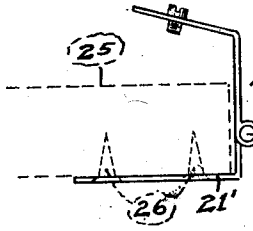


Fig. 5



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UNITED STATES PATENT OFFICE.

ALYS MADER, OF PITTSBURGH, PENNSYLVANIA.

VISE.

Application filed February 26, 1925. Serial No. 11,727.

To all whom it may concern:

Be it known that I, ALYS MADER, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Vises, of which the following is a specification.

This invention relates to vises, and while primarily intended for securing a carpenter's scraper blade when sharpening the latter with a file, it will be obvious that the device may be employed for securing blades having single taper cutting edges, for the sharpening operation, wherein it is found to be applicable.

Important objects of the invention are to provide a vise of the type described, in a manner as hereinafter referred to, which will secure a scraper blade in a position to facilitate the sharpening thereof, which is simple in its construction and arrangement, strong, durable and efficient in its use, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention can be made without departing from the spirit of the invention.

In the drawing forming a part of this specification wherein like numerals of reference designate corresponding parts throughout the several views:—

Figure 1 is a top plan view of a scraper blade vise in accordance with my invention,

Fig. 2 is a front view thereof,

Fig. 3 is an end view of the device,

Fig. 4 is an end view of the shiftable jaw and associated guide block, and

Fig. 5 is an end view of a modified form of the vise attaching element.

Referring in detail to the drawing 1 denotes a comparatively heavy sheet metal body portion consisting of an elongated flat rearwardly sloped top 2, provided at each end with an integrally formed depending end wall 3 and a rearwardly extending top extension 4. The lower edge of each of the end walls 3 is provided with a pair of spaced apertured ears 5, disposed laterally outward, and upon which the device rests when positioned for use and by which the device may be permanently fixed in position if desired.

The forward edge of the top 2 is formed with a longitudinally extending depending flange 6 for rigidly reinforcing the top 2. The latter is further provided with a longitudinally extending slot 7 disposed adjacent to the front thereof.

An adjustment screw 8, having each end thereof suitably journaled for rotation in respective end walls 3, is positioned below the top 2 and extends parallel to and directly beneath the slot 7. One end of the screw 8 is provided with an extended squared shank 9 adapted for the reception of a socket key or crank for facilitating the rotation of the adjustment screw 8, for the purpose to be described.

A guide block 10 is mounted on the screw 8 and threadably engages the latter. The block 10 is positioned below the top 2 and is formed with a neck 11 which extends through the slot 7.

A flat shiftable jaw 12 is secured to the top of the block neck 11 by means of the screws 13, and a similar constructed fixed jaw 14 is secured, in alinement with the shiftable jaw 12, at one end of and on the top 2, by means of the screws 15.

The forward ends of the jaws 12 and 14 are beveled as indicated at 16, and the inner or opposed side edges thereof are provided with longitudinally extending V-shaped grooves 17 for the purpose of augmenting their engagement with a scraper blade adapted to be secured therebetween as shown at 18.

When the body portion 1 is positioned on a level support the sloped top 2 and the jaws 12 and 14 will secure the scraper blade in the most suitable inclined position to facilitate the sharpening operation by filing with a hand file. The beveled edges 16 of the jaws 12 and 14 will provide clearance for such filing operation.

The body portion is secured against movement on some suitable support therefor by means of a pair of clamp elements each of which consists of an upper inclined portion 19, the vertical portion 20 and the horizontal portion 21. The portion 19 is formed with an elongated slot 22 and overlaps the respective top extensions 4. A screw 23 extends through the slot 22, and is threadably mounted in the top extension 4, thereby allowing the adjustment of the clamping elements relatively to the body portion 1. The horizontal portion 21 of the clamping

element is provided with a set screw 24 which is adapted to engage the support upon which the device is mounted, and secure the latter against movement thereon.

The modified form of clamp element shown in Fig. 5, of the drawing is identical in construction, relatively to the preferred form, except that the horizontal portion 21′ thereof is adapted to be permanently fixed to the support 25 of the device by means of screws 26. Further the vertical portion 20′ of the modified form of clamp element is provided with a hinge 27 whereby the device may be swung from the operative position on the support 28. The modified form of clamp element is intended for use if the device is attached to a carpenter's tool box, as the hinge 27 will permit of it to be swung to the operative position on the outside of the box and to the inoperative position on the inside of the box.

What I claim is:

In a scraper blade vise, the combination of a sheet metal body portion including a pair of integrally formed depending end walls, said body portion provided with a rearwardly sloping top, the latter being formed with a longitudinally extending slot disposed adjacent to the front thereof, an adjustment screw rotatably mounted in said end walls and disposed parallel to and directly beneath said slot, a guide block threadedly engaged by said screw and provided with a neck extending upwardly through said slot, a shiftable jaw detachably secured to said neck and mounted on said top, a jaw fixedly mounted on said top, said jaws disposed at an inclination on said sloped top and provided with beveled forward ends, the opposed side edges of said jaws being formed with longitudinally extending parallel disposed grooves, said top provided at each end with a rearwardly disposed extension, and means adjustably connected with said extensions for attaching said body portion to a support, substantially as described and for the purpose set forth.

In testimony whereof I affix my signature.

ALYS MADER.