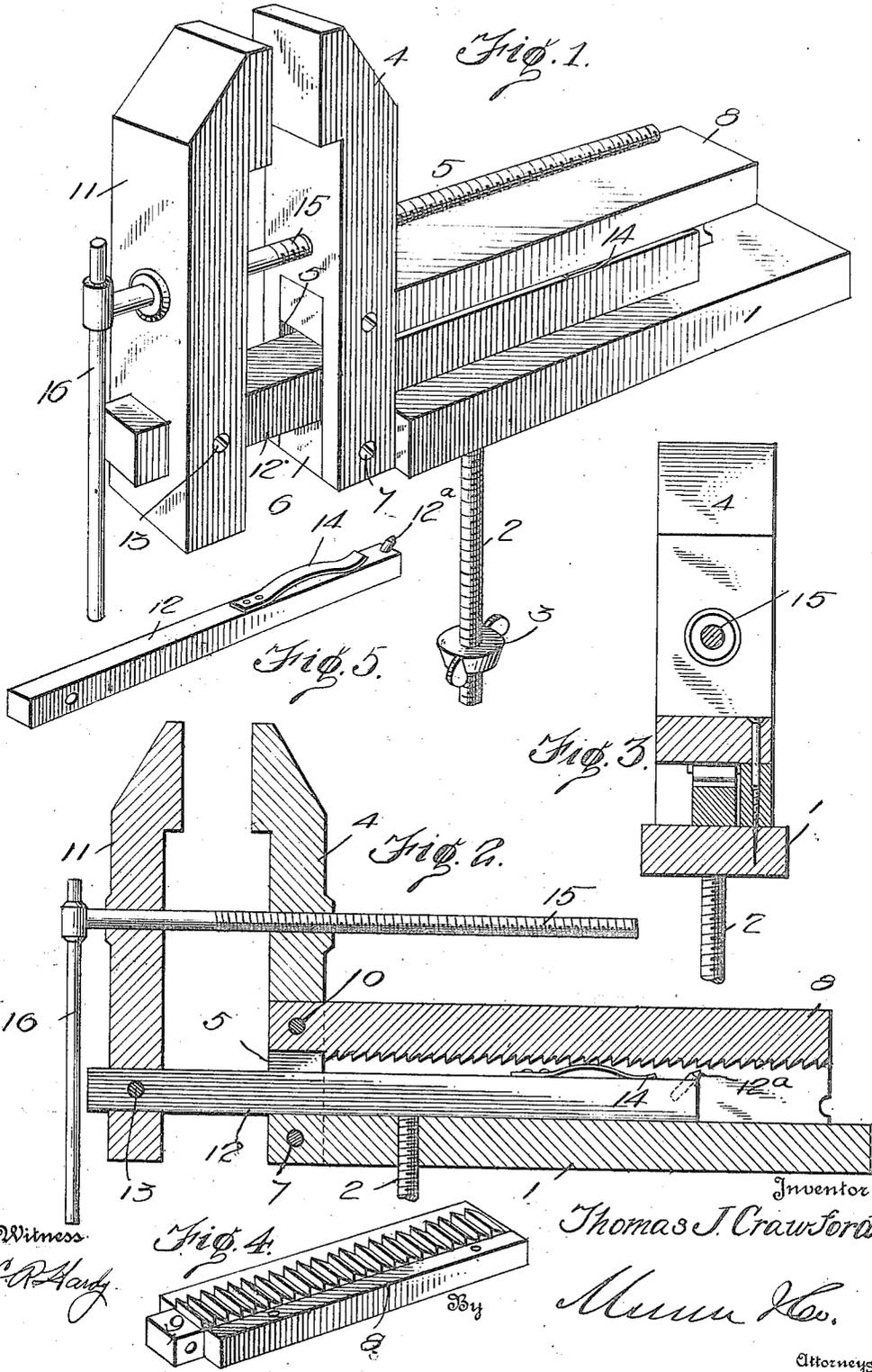


T. J. CRAWFORD.
 VISE.
 APPLICATION FILED OCT. 23, 1917.

1,269,262.

Patented June 11, 1918.



Witness
C. R. Hardy

Inventor
Thomas J. Crawford

Munn Co.

Attorneys

UNITED STATES PATENT OFFICE.

THOMAS JOHN CRAWFORD, OF OTTAWA, ILLINOIS.

VICE.

1,269,262.

Specification of Letters Patent. Patented June 11, 1918.

Application filed October 23, 1917. Serial No. 198,113.

To all whom it may concern:

Be it known that I, THOMAS J. CRAWFORD, a citizen of the United States, and a resident of Ottawa, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Vises, of which the following is a specification.

My invention is an improvement in vises, and has for its object to provide a light, compact vise of wood, which may be easily transported by the user, and which may be placed upon a temporary bench by means of one bolt and nut.

In the drawings:

Figure 1 is a perspective view of the improved vise;

Fig. 2 is a longitudinal vertical section;

Fig. 3 is a transverse vertical section;

Fig. 4 is a perspective view of the ratchet bar; and

Fig. 5 is a similar view of the holding bar.

In the present embodiment of the invention, a base plate 1 is provided, having connected therewith a screw 2 which is engaged by a wing nut 3 to permit the plate to be connected to a suitable support as, for instance, a bench or the like.

One of the jaws 4 of the device is connected with the plate 1, the said jaw having a transverse notch or recess 5 in its lower end, within which a tenon 6 on the plate 1 is engaged, and the tenon is secured to the jaw by a screw 7, as shown. A second plate 8 is also connected with the jaw, the said plate being a ratchet plate and having ratchet teeth, as shown more particularly in Fig. 4. This ratchet plate has also a tenon 9 which is received within the notch or recess 5, and the tenon is secured to the jaw by means of a screw 10.

The plates 1 and 8 are spaced apart vertically from each other, as shown, and the teeth are on the under side of the plate. The other jaw 11 has connected therewith a bar 12, the said bar being passed through an opening in the jaw and being secured to the jaw by a screw 13. This bar 12 passes through a recess 5 between the plates 1 and 8, and the said bar has a catch 12^a at the end remote from the jaw 11 for engaging the ratchet teeth. The bar also carries a spring 14, which engages the ratchet teeth, and is for the purpose of releasing the catch of the bar 12 from the rack bar.

A suitable screw 15 is journaled in the jaw 11 and has threaded engagement with the jaw 4, and this screw has a cross handle 16 for convenience in turning the same. By means of the screw the jaws 4 and 11 may be approached toward each other and moved away from each other, as may be desired.

The catch 12^a by its engagement with the ratchet teeth prevents the lower end of the jaw 11 from moving inward when an object is clamped between the jaws. As soon as the object is released, however, the spring 14 presses the bar 12 down, which may be considered as a latch bar, thus releasing the catch from the teeth and permitting the free movement of the jaws toward and from each other.

It will be noticed from an inspection of Fig. 2 that the lower ends of the jaws 4 and 11 are at the level of the bottom of the plate 1. By means of the screw 2 and the nut 3 the improved vise may be connected with a bench, box or the like to hold the same in place by merely passing the screw through an opening in the bench or box and tightening the nut. This vise is of wood, with the exception of the screw, ratchet, catch and spring.

In use, after the vise has been placed, when it is desired to clamp a board, for instance, the board is placed between the jaws of the clamp and the jaw 11 is pushed toward the jaw 4 until the jaws engage the board. The jaws may then be tightened by means of the screw and the handle 16.

I claim:

A vise comprising a pair of jaws, one jaw having secured to the bottom thereof a base plate provided with means for engaging a fixed support, said jaw having a ratchet plate spaced above the base plate, the other jaw having a bar extending through the first named jaw and between the plates and provided with a catch for engaging the ratchet teeth to limit the inward movement of the bar when said last named jaw is tilted with respect to the other jaw by its engagement with an object between the jaws, said bar carrying a spring engaging the teeth to release the catch when the pressure on the jaw is relaxed, and a handled screw journaled in the last named jaw and having threaded engagement with the first named jaw.

THOMAS JOHN CRAWFORD.