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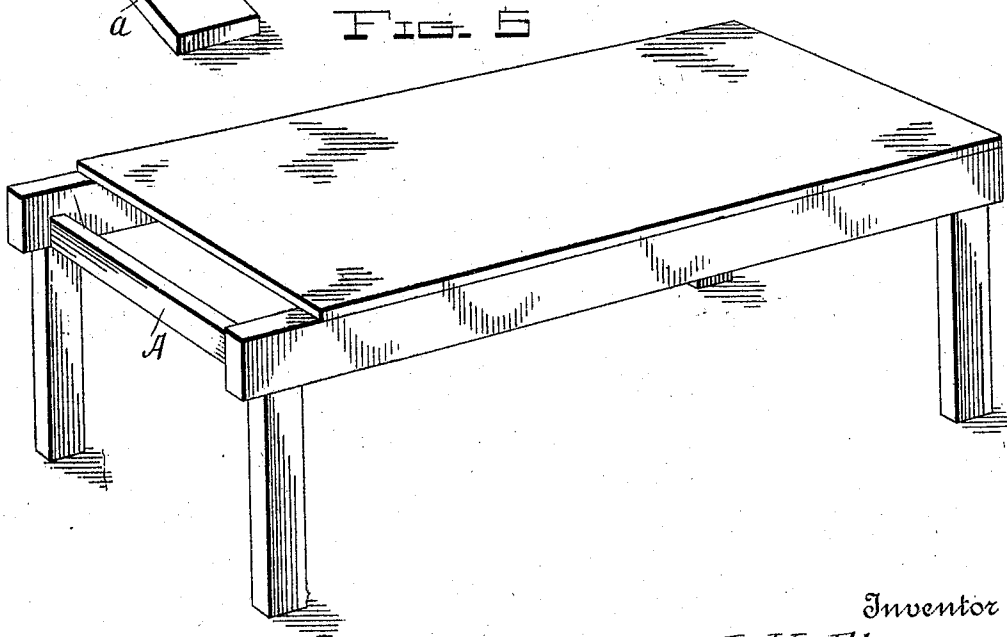
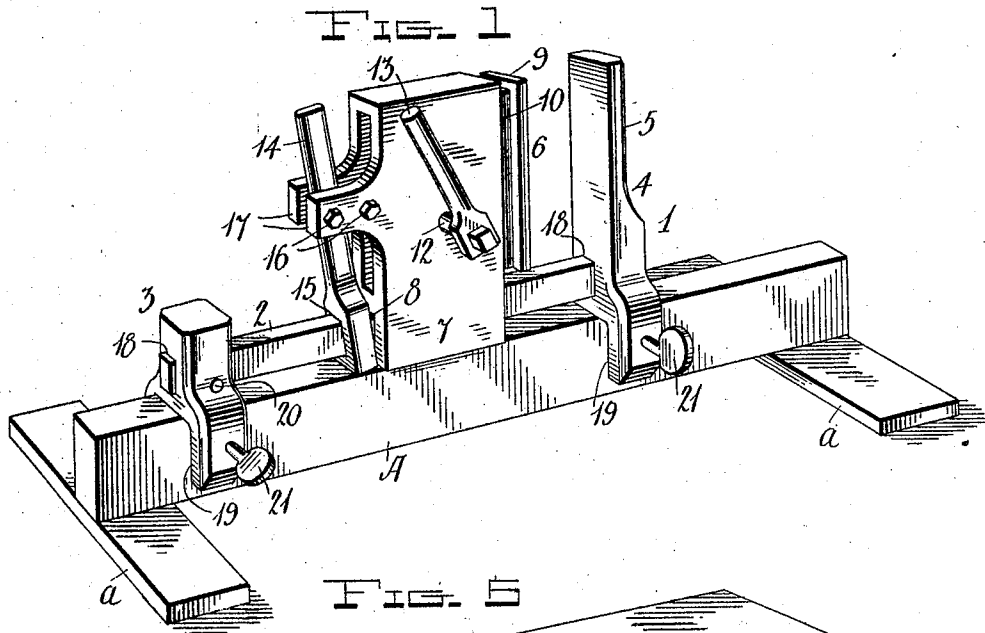
PATENTED JUNE 19, 1906.

J. K. ELMER.

WISE.

APPLICATION FILED NOV. 13, 1905.

2 SHEETS—SHEET 1.



Witnesses

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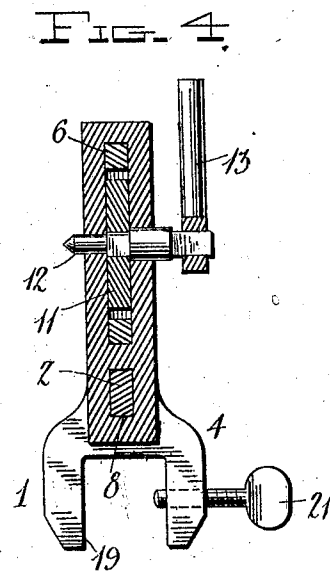
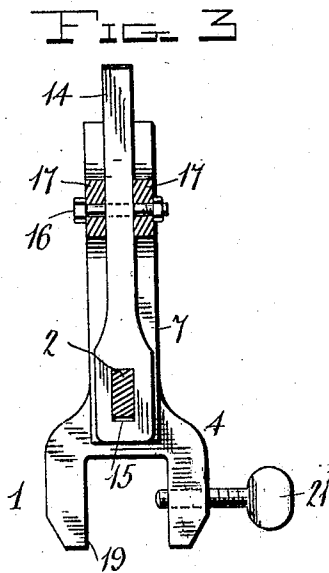
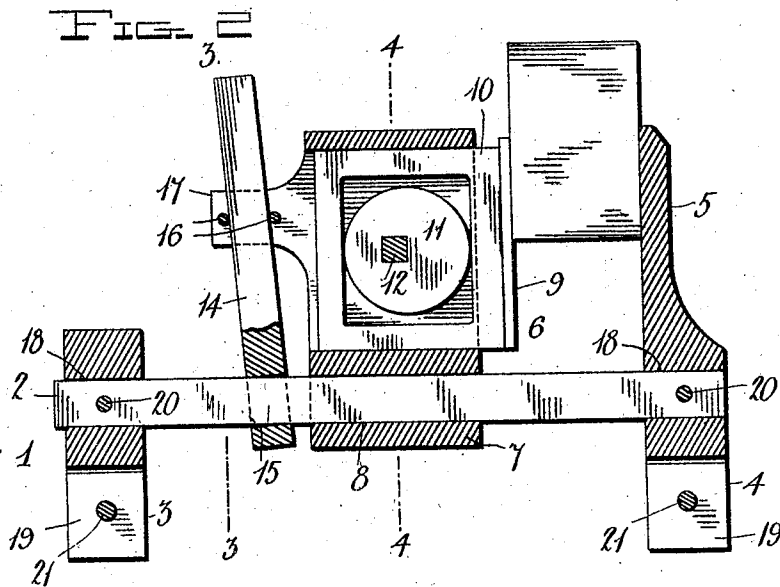
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN K. ELMER, OF GREELEY, COLORADO.

WISE.

No. 824,000.

Specification of Letters Patent.

Patented June 19, 1906.

Application filed November 13, 1905. Serial No. 287,123.

To all whom it may concern:

Be it known that I, JOHN K. ELMER, a citizen of the United States, residing at Greeley, in the county of Weld and State of Colorado, have invented certain new and useful Improvements in Vises; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in vises for use by carpenters and others; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a simple and efficient portable vise which may be conveniently carried from place to place and readily mounted upon a bench, carpenter's horse, or any other support.

The above and other objects which will appear as the nature of my invention is better understood are accomplished by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved vise, showing the same mounted upon a support which is adapted to rest upon the floor or ground. Fig. 2 is a vertical longitudinal sectional view. Figs. 3 and 4 are vertical transverse sectional views, taken, respectively, on the line 3 3 and 4 4 in Fig. 2; and Fig. 5 is a perspective view of a carpenter's bench, having one end constructed to receive my improved vise.

Referring to the drawings by numeral, 1 denotes my improved portable vise which comprises a straight bar 2, having at its ends clamps 3 4 to permit it to be secured upon a bar or beam A, which may be supported in any desired manner. The clamp 4 is formed with an upwardly-projecting portion 5, which forms the stationary jaw of the vise. The movable jaw 6 of the vise is carried by a frame 7, which slides longitudinally upon the bar 2 between the two clamps. This frame, as shown, is of rectangular form and is provided in its lower portion with a slot 8, through which the bar 2 extends. The movable jaw 6 is mounted to slide transversely in the upper portion of the frame 7, and it consists of a jaw-face 9 and a body portion 10, which is of rectangular form and adapted to slide within the frame 7. The jaw 6 is actuated by an eccentric 11, which is disposed in an opening formed in the portion 10 of the

jaw and is secured upon a shaft 12, which extends through the sides of the frame 7 and has upon one of its ends a hand-lever 13. When said lever is oscillated, the eccentric 11 will swing the jaw 6 toward and from the stationary jaw 5. The frame 7 is adapted to be locked in an adjusted position upon the bar 2 by means of a dog or lever 14, which has its lower end slotted, as at 15, to receive the bar 3 and its upper end loosely connected to the frame 7. This connection, as shown, is formed by allowing the upper end of the lever 14 to project loosely between two stop-bolts 16, which are provided in a pair of parallel arms 17, formed upon the frame 7, adjacent to its upper rear end. The slot 15 in the lever 14 is of a sufficient size to permit it to slide freely upon the bar 2 when disposed in a plane at right angles to the latter, but as soon as the frame 7 is shifted rearwardly or toward the lever 14 without the latter being maintained parallel with it or at right angles to the bar 3 said lever will tilt to an angular position, as shown in Fig. 2 of the drawings, and bite the upper and lower edges of the bar 2 to prevent the rearward movement of the frame 7. In using the vise the frame 7 and its locking-lever 14 are slid longitudinally upon the bar to the desired position, and the lever 13 is then oscillated to force the jaw 6 toward the jaw 5. As the jaw-face 9 engages the object placed between it and the jaw 5 the frame 7 will move rearwardly to a slight extent to cause the lever 14 to assume an angular position and lock it against further rearward movement.

The clamps 3 4 are similar in form, each having a slot or opening 18 to receive one end of the bar 2 and a forked or bifurcated lower end 19. The ends of the bar 2 are retained in the slots 18 by bolts 20 or by any other suitable means. The bifurcated ends 19 of the clamps are adapted to straddle the beam or bar A and to be rigidly secured thereon by means of set-screws 21, which pass through threaded openings formed in the portions 19 on one side. The beam or bar A may be supported, as shown in Fig. 1, by securing cross-strips a adjacent to its ends, so that it is adapted to rest upon the ground or floor by mounting it in one end of a carpenter's bench or table, as shown in Fig. 5 of the drawings, or by mounting it in any other suitable manner. If desired, the bar A may be the longitudinal or top bar of a carpenter's horse.

The construction, operation, and advan-

tages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be seen that by providing the
 5 clamps 3 4 upon the bar 2 and making the vise portable it may be conveniently carried from place to place and quickly and easily mounted for use. The clamps 3 4 may be attached to any suitable object or support,
 10 so that the vise may be adapted for various uses. When supported as shown in Fig. 1, it may be conveniently used to support doors while being dressed to fit the frames in which they are to swing, and also while the locks
 15 and hinges are being put on. It may also be used to support screen-frames and window-sashes while being fitted to the frames in which they are to be mounted. When mounted upon the bar A, provided upon the
 20 carpenter's bench, as shown in Fig. 5, it may be adjusted forwardly and rearwardly upon the end of the bench, so that strips of wood or other objects laid upon the bench may have their ends rigidly clamped in the vise.
 25 Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

30 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A portable vise comprising a bar, clamps upon said bar, a stationary jaw, a frame slidable upon said bar, means for securing said
 35 frame in an adjusted position and an adjustable jaw in said frame.

2. A portable vise comprising a bar, clamps

adjacent to the ends thereof, a stationary jaw, a frame slidable upon said bar, a locking-
 40 lever slidable upon said bar and loosely engaged with said frame, and a movable jaw in said frame.

3. A portable vise comprising a bar, an attaching means upon said bar, a stationary
 45 jaw, a frame slidable upon said bar, a locking-lever slidable upon said bar and loosely engaged with said frame, a sliding jaw in said frame, and an eccentric for operating
 50 said sliding jaw.

4. A portable vise comprising a bar, of
 55 clamps at the ends thereof having forked portions, set-screws in said forked portions, a stationary jaw formed upon one of said clamps, a frame slidable upon said bar, means for locking said frame in an adjusted
 position upon said bar and an adjustable jaw in said frame.

5. A portable vise comprising a bar, of
 60 clamps at the ends thereof having forked portions, set-screws in said forked portions, a stationary jaw formed upon one of said clamps, a frame slidable upon said bar, a slotted lever slidable upon said bar and having
 65 one of its ends loosely connected to said frame, a slidable jaw in said frame and an eccentric for operating said sliding jaw, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-
 70 nesses.

JOHN K. ELMER.

Witnesses:

M. C. WEST,
 M. O. WEST.