

J. MIGNOLA, JR.

VICE FOR SAWS.

APPLICATION FILED OCT. 27, 1909.

952,013.

Patented Mar. 15, 1910.

FIG. 1

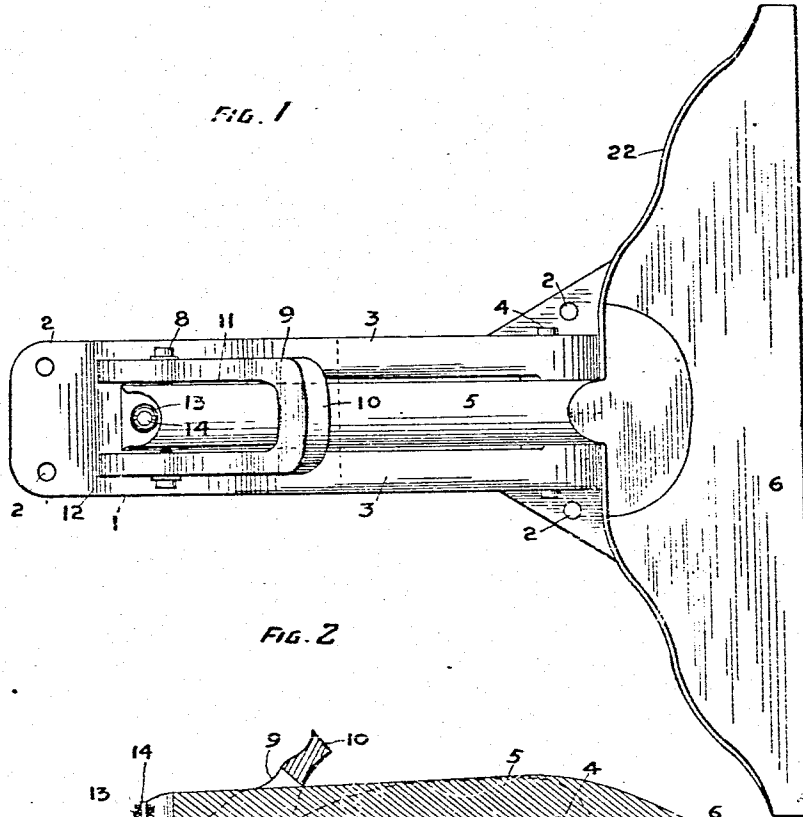


FIG. 2

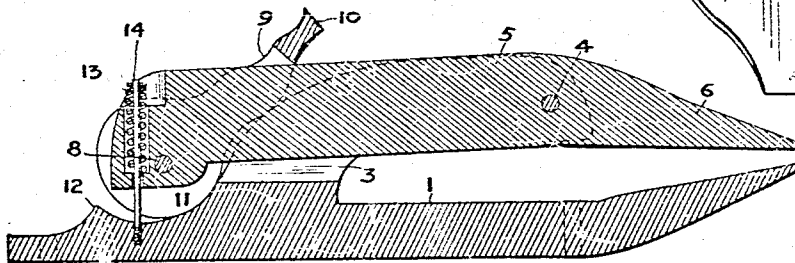
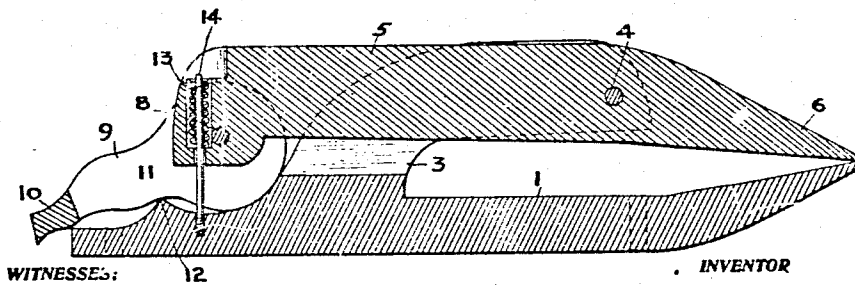


FIG. 3



WITNESSES:

N. B. Keating.
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UNITED STATES PATENT OFFICE.

JOHN MIGNOLA, JR., OF ALAMEDA, CALIFORNIA

VICE FOR SAWS.

952,013.

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Application filed October 27, 1909. Serial No. 524,955.

To all whom it may concern:

Be it known that I, JOHN MIGNOLA, JR., a citizen of the United States, residing at Alameda, in the county of Alameda and State of California, have invented new and useful Improvements in Vises for Saws, of which the following is a specification.

The object of the present invention is to provide an improved vise for holding saws. Prior vises used for this purpose, so far as my knowledge extends, have been defective in that they do not hold the saw with equal firmness and pressure throughout its entire length, rendering it difficult and laborious to sharpen a saw held in such a vise. The present vise is so constructed as to avoid the above defect.

In the accompanying drawing, Figure 1 is a plan view of the saw; Fig. 2 is a longitudinal section thereof in the open position; Fig. 3 is a similar view in the closed position.

Referring to the drawing, 1 indicates the base of the vise, which is formed with screw holes 2 for securing it to a work bench or table. Said base is, at one end, greatly widened, as shown at 2 2, and tapers in thickness almost to a sharp edge, forming a stationary jaw, said stationary jaw sloping upward from the base. Rising from said base and extending forwardly toward said stationary jaw are two arms 3 between which is pivoted, as shown at 4, a lever 5, on the front end of which is formed a movable jaw 6, said movable jaw being similar in general form to the stationary jaw, but sloping downward from said lever. Between the comparatively thin and long lips of said stationary and movable jaws the saw is clamped.

In order to depress the lip of the movable jaw toward that of the stationary jaw, there is pivoted on the rear end of the jaw lever 5, as shown at 8, a yoke lever 9, the central member 10 of which forms a finger piece, the sides 11 of which yoke extend on opposite sides of the lever and are enlarged at the ends to form eccentrics or cams around the pivotal connection 8 of the yoke lever with said jaw-lever. When the yoke is moved from its forward position rearwardly through nearly two right angles, the eccentric ends of the yoke, riding upon a concave seat 12 formed on the base, raise the rear end of the lever and correspondingly depress the forward end thereof. In order to raise the lip

of the movable jaw from that of the stationary jaw when the yoke is returned to its forward position, there is provided a coiled spring 13 around a rod 14 passing through the rear end of the lever, 5, said spring 13 bearing upon the top of the lever 5.

I am aware that there has long been used a vise for saws similar to that above described that in every respect except for the addition of the spring, and for the fact that, instead of using a yoke pivotally connected at the rear end of the lever, there is used therewith an operating lever having a single point of engagement with the movable jaw lever beneath the rear end of the latter. Although this device has been on the market for many years, I have found it, unless quite new, to be practically worthless for the purpose desired. The reason is that, with that construction, if there is the slightest looseness of the bearings for the pivot of the movable jaw lever, then since the operating lever presses the rear end of the movable jaw lever upward at a single point only, and that substantially on the central longitudinal line of the latter lever, if, owing to the looseness of the bearings, the point of contact or pressure is slightly to one side of said central line, which is very liable to happen owing to the great distance of this point from the bearings of said movable jaw lever, then the pressure by the operating lever, being at one side of the central vertical plane between the bearings of the movable jaw lever, tends to tilt the same to one side, so that the pressure is considerably greater between the lips of the jaws at one end of the vise than at the other. In fact, after a little use, it is rarely the case that the saw is held firmly except at one end of the vise. My present invention remedies this defect by providing that the upward pressure upon the rear end of the movable jaw lever is applied equally at both sides of said latter lever, so that there can never be any tendency whatever of said lever to twist, or to produce a greater pressure at one end of the vise than at the other.

I claim:—

1. A vise for saws comprising a base widened at the end to form a stationary jaw, arms extending upwardly and forwardly from said base, a movable jaw, a lever therefor pivoted between the forward end of said arms and a yoke-shaped cam lever, the sides of which extend on opposite sides of the rear

end of the jaw lever, and are pivoted to said jaw lever, said sides being formed with cam-shaped ends arranged to bear upon said base to raise said jaw lever by the pivoted movement of said yoke lever, substantially as described.

2. A vise for saws comprising a base widened at the end to form a stationary jaw, arms extending upwardly and forwardly from said base, a movable jaw, a lever therefor pivoted between the forward end of said arms, and a yoke-shaped cam lever, the sides of which extend on opposite sides of the rear end of the jaw lever, and are pivoted to said

jaw lever, said sides being formed with cam-shaped ends arranged to bear upon said base to raise said jaw lever by the pivotal movement of said yoke lever, and a spring for normally depressing the rear end of said jaw lever, substantially as described.

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

JOHN MIGNOLA, JR.

Witnesses:

FRANCES M. WRIGHT,
D. B. RICHARDS.