(No Model.)

M. Y. LEWIS.

SAW FILING BENCH.

No. 425,332. Patented Apr. 8, 1890.

Fig. 3.

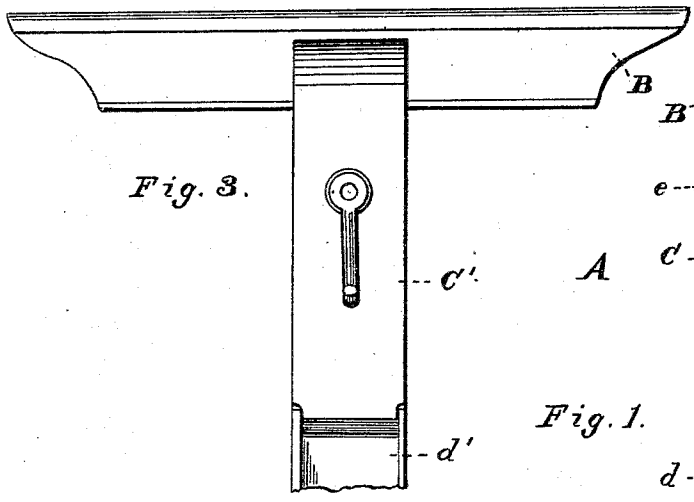
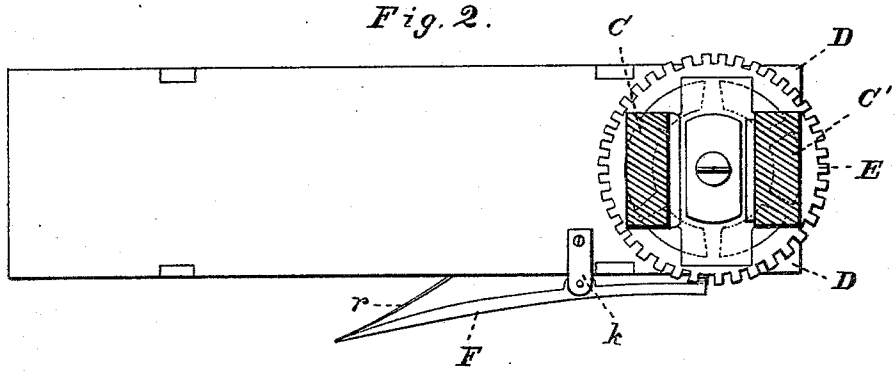


Fig. 1.

Fig. 2.



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UNITED STATES PATENT OFFICE.

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SAW-FILING BENCH.

SPECIFICATION forming part of Letters Patent No. 425,332, dated April 8, 1890.

Application filed August 31, 1889. Serial No. 322,501. (No model.)

To all whom it may concern:

Be it known that I, MITCHELL Y. LEWIS, a citizen of the United States, and a resident of Morrison, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Saw-Filing Benches; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention and is a side view. Fig. 2 is a top view, partly in section. Fig. 3 is a detail and end view.

This invention relates to benches and adjustable holding attachments thereto for filing saws; and it consists in the novel construction and combination of parts, as hereinafter set forth, and pointed out in the claims.

The object of the invention is to provide a saw-holding clamp secured in a pivotal manner to a bench or other suitable base, whereby the said clamp and saw may be horizontally turned and adjusted at any angle by the hand and knee of the operator to present the saw-blade in the proper light for filing it.

In the accompanying drawings, the letter A designates the saw-holder consisting of the horizontal parallel clamping-jaws B, attached to opposite vertical supports C C′, secured to the vertical metallic braces *d d′* of a horizontal circular serrated base-plate E, pivoted to the end of a bench D.

One of the vertical supports C′ is hinged to the brace *d′* to provide for the recession of its jaw to permit the introduction of the saw. The opposite support C is rigid in position, and, like the opposite hinged support C′, is perforated transversely below the clamps to receive a screw-bolt *e*, which sustains the interposed spring *g*, and is designed to serve in forcibly closing the jaws together against the saw. A crank-handle *h*, having an intimately-threaded bearing in its head *i*, is provided to engage the threaded end of the bolt *e*, in order to effect the closing of the clamps against the saw-blade.

F indicates a horizontally-extending spring pawl or lever pivoted to a bracket *k* on the front edge of the bench and operating to engage the serrations of the base-plate E, for the purpose of securing the saw-holding clamp in position after adjustment. This horizontal lever-pawl F is curved from inner end to outer end and has a spring *r* interposed between its inner end and the front edge of the bench to hold the pawl end to its engagement with the serrations of the base-plate.

It will be observed that owing to the disposition of the parts the operator is enabled to alter the position of the clamps, in order that the saw may intercept the rays of light at the proper angle for guiding the file without having his attention withdrawn from the work in hand. By simply pressing against the inner end of the lever with his knee or leg the pawl will be released from its engagement with the base-plate, so that the clamp can be turned to bring the saw to the desired angular position. The pawl is then permitted to resume its normal position, securing the clamp in place.

The pivot-pin S of the base-plate is threaded at the end beneath the bench to engage a crank-nut Z, having a washer Z′, and provided for the purpose of drawing the base-plate to the face of the bench in case it should work loose. By means of this device the clamp or holder can be always made firm, while its adjustment can be accomplished with facility.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a saw-filing bench, the combination, with the bench and its pivoted horizontal front pawl, of the circular serrated base-plate, its pivot-bolt, crank-nut, and washer, the fixed and hinged clamp-jaws, their tightening-bolt, and interposed spring, substantially as specified.

2. The saw-filing bench comprising the main bench having a perforated end and a curved longitudinal pawl-lever pivoted to a bracket secured to the front edge of said bench, the circular serrated base-plate, its braces, and the rigid and hinged saw-holding jaws secured to said braces, the pivot-bolt, its crank-nut, and washer, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

MITCHELL Y. LEWIS.

Witnesses:
CHAS. BENT,
CHAS. E. SPERRY.