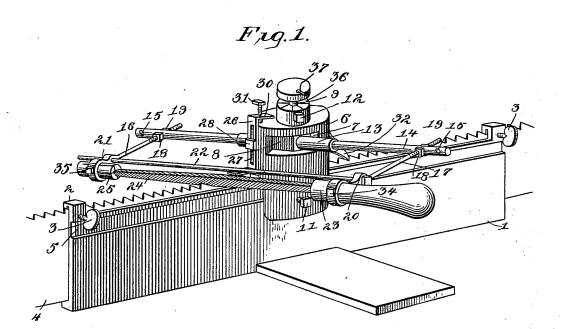
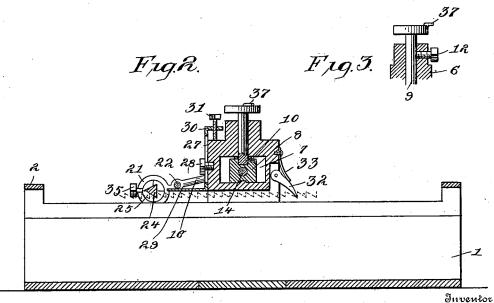
F. DUQUEMIN. SAW SHARPENING MACHINE.

(Application filed July 15, 1899.)

(No Model.)





Witnesses

Frederic Duquemin

by Olman Controlly

United States Patent Office.

FREDERIC DUQUEMIN, OF FALL RIVER, MASSACHUSETTS.

SAW-SHARPENING MACHINE.

SPECIFICATION forming part of Letters Patent No. 648,932, dated May 8, 1900.

Application filed July 15, 1899. Serial No. 723,925. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC DUQUEMIN, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Saw-Sharpening Machine, of which the

following is a specification.

My invention relates to tools for sharpening saws—such as carpenters' handsaws, buck10 saws, meat-saws, and the like—and has for its object to provide a tool of this class of simple and cheap construction, having improved means for regulating the bevel, depth, and pitch of the teeth, preferably after the assaw has been jointed.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically

20 pointed out in the claim.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is a perspective view illustrating my invention in position for practical operation. Fig. 2 is a vertical longitudinal secsotional view of the tool, the saw being partly illustrated in dotted lines. Fig. 3 is a detail sectional view.

Like numerals of reference mark the same parts wherever they occur in the various fig-

35 ures of the drawings.

by a set-screw 12.

Referring to the drawings by numerals, 1 indicates the base of the tool, upon which is secured an upright split or hollow clamp 2, provided with thumb-screws 3 3 at its ends to 40 bear against the blade 4 of a saw—such as a carpenters' handsaw, bucksaw, or meat-saw—and longitudinally grooved, as at 5, to receive and permit of the sliding thereon of a head 6. The head is provided with a horizon-tal opening 7 to receive a block 8, arranged to swivel on a vertical axis by means of a pin 9, passing vertically through the head from the top and secured to the block by a smaller pin or screw 10. The head straddles the clamp 50 and is adjusted and held thereon by a set-screw 11, the pin 9 being secured in the head

13 indicates a tube secured in the block 8 and projecting laterally therefrom, in which is slidably fitted a rod 14, having holes 15 55 near each end to receive threaded rods or bolts 16 17, secured adjustably therein by means of nuts 18 19 on opposite sides of the rods. At the ends of the rods or bolts 16 17 are blocks 20 21, provided with openings to 60 receive a rod 22 and larger openings to receive the ferrule 23 of the handle of a file 24 and a split block 25 to encompass the point of the file.

At one side of the head 6 is adjustably secured a gage 26, longitudinally slotted, as at 27, to receive its securing-bolt 28, provided with a bottom flange 29 to support the rod 22 and a top flange 30, through which passes a set-serew 31, bearing against the top of the 70 head to adjust the height of the gage. On the opposite side of the head is pivoted a pawl 32, held in contact with the teeth of the saw by a spring 33. The ferrule 23 of the file is held in the block 20 by a set-serew 34, and the 75 split block 25 is held in block 21 by a set-serew 35.

The upper end of the head 6 is marked, as at 36, to form a dial, upon which a pointer 37 on the upper end of the pin 9 indicates the 80 adjustment of the swiveling block 8.

After the saw is jointed and the parts assembled as shown and described the saw may be filed by reciprocating the file in the usual manner.

To regulate the bevel of the teeth or the angle at which the file may be inclined to the length of the blade of the saw, the swiveling block 8 is adjusted on its axis and secured by screw 12.

To regulate the depth of cut, the gage 26 is raised or lowered by set-screw 31, carrying rod 22 with it, and secured by securing-bolt 28.

To regulate the pitch of the saw or the distance apart of the points of the teeth, the fer- 95 rule 23 and split block 25 are turned in blocks 20 and 21 and secured by set-screws 34 and 35.

By means of the constructions and adjustments described the file is properly set and guided and all the operations accurately and 100 quickly performed.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a saw-sharpening tool, the combination with a support, of a head thereon provided with a transverse opening, a perforated block pivotally secured in the opening, a reciprocating rod through the perforation, each end of which is provided with transverse perforations, a threaded rod adjustably secured in one of the openings at each end of said rod by means of a nut upon each side thereof, a

In a saw-sharpening tool, the combination with a support, of a head thereon provided with a transverse opening, a perforated block pivotally secured in the opening, a reciproling-rod and file-supports adjustably secured to the free ends of said threaded rods, and an adjustable support for the supporting-rod.

FREDERIC DUQUEMIN.

Witnesses:
MELVIN W. COTTLE,
NATHANIEL DRING.