

(No Model.)

J. L. McDOUGALL.
SAW FILING MACHINE.

No. 553,254.

Fig. 1. Patented Jan. 21, 1896.

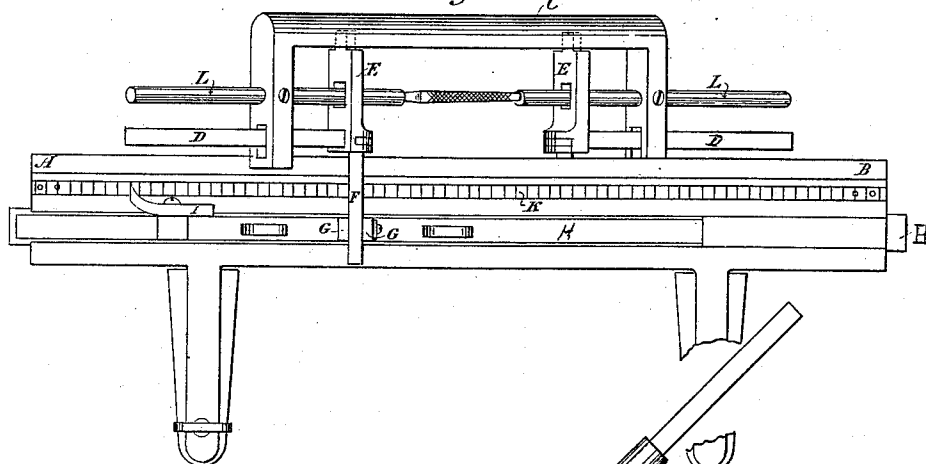


Fig. 2.

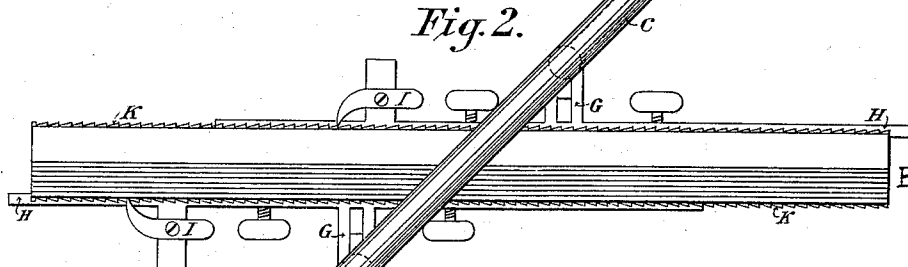
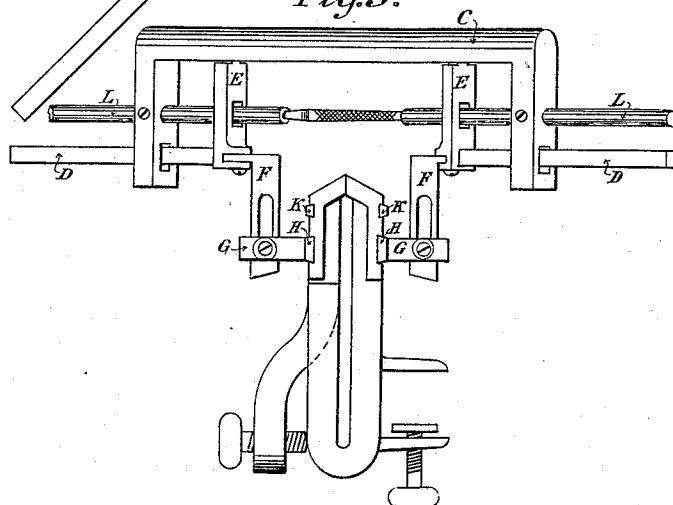


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN L. McDOUGALL, OF WINNIPEG, CANADA, ASSIGNOR OF ONE-THIRD
TO DANIEL McMILLAN, OF SAME PLACE.

SAW-FILING MACHINE.

SPECIFICATION forming part of Letters Patent No. 553,254, dated January 21, 1896.

Application filed April 1, 1895. Serial No. 544,047. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. McDOUGALL, carpenter, a citizen of Canada, residing at Winnipeg, in the county of Selkirk, in the Province of Manitoba, Canada, have invented a new and useful Saw-Filer, of which the following is a specification.

My invention relates to improvements in saw-filing machines, and the objects of my invention are, first, to provide for the filing of the teeth of a handsaw in such a manner that they can be filed of even size, pitch, and depth throughout the length of the saw, and, second, that the teeth can be filed at any required angle and evenly throughout the length of the saw. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation or view of the entire machine. Fig. 2 is a top view of the same; Fig. 3, an elevation of the end view of the same.

Similar letters refer to similar parts throughout the three figures.

In the drawings, the saw-vise is lettered A B, and to aid explanation in this specification one end of the saw-vise is lettered A and shall be termed "the end A" and the other end is lettered B and termed "the end B." The saw-vise is to be of any length required, and shall be secured to the table or bench by means of either one or two bench-vises of such nature or pattern as shall be found most suitable.

C is the sliding frame, and is worked backward and forward by the hand, and is the frame which governs the filing. The frame is allowed certain play in its bearings, which allows of the filing of the teeth to the required depth.

D D are the sliding bars on which the frame C slides and are attached to or form part of the upright studs E E, which are connected to the sliding studs F F by a hinge in the manner shown in Figs. 1 and 3.

G G are projections on and forming part of the slides H H, between which projections the sliding studs F F are moved up or down at will, for the purpose of raising or lowering the sliding frame to suit the nature of the teeth required to be filed. The slides H H

are for the purpose of setting the sliding frame containing the file at any required angle crosswise with the saw. The slides are governed by dogs I I, working on projections forming part of the slides H H.

K K are movable ratchets sliding in the sides of the saw-vise A B and are for the purpose of regulating the size of the teeth. They are held in the positions required by set-screws or thumb-screws at either end.

L L are two file-holds, are so arranged that they can be made to hold any ordinary size saw-file, and are secured by means of set-screws or thumb-screws in sliding frame C.

The saw required to be filed is placed within the jaws of the saw-vise A B with teeth uppermost and secured by means of a lever or levers with requisite turn-screws. A file is secured between the file-holds L L. The sliding studs are put in position required. The slides H H are adjusted by moving them toward the end B until the sliding stud F on one side is even with the end and the required angle is obtained. The sliding frame C is then moved backward and forward, at the same time filing the tooth until finished. Then the dogs I I are loosened, the slides H H are moved toward the end A either one notch or more of the ratchets K K, as required, then a second tooth is filed, and this is repeated until the filing of the saw is completed.

I am aware that prior to my invention bench-vises have been made, and saw-vises have been made in conjunction with saw-filing. I therefore do not claim such a combination broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

In a saw filing machine the combination of the clamping jaws for the saw, the adjustable rack bars secured to the upper ends thereof, the slidable supports (H) dovetailed into the clamping jaws, studs (F) secured thereto, dogs or pawls I, I, studs (E) hinged to studs (F) and provided with bars (D) and the file carriage slidably mounted upon said bars.

JOHN L. McDOUGALL.

Witnesses:

ALEX. HAGGART,
W. B. MERCER.