D. H. ISEMINGER.

Saw-Sharpening Machines.

No. 147,057. Patented Feb. 3, 1874.

Fig. 1

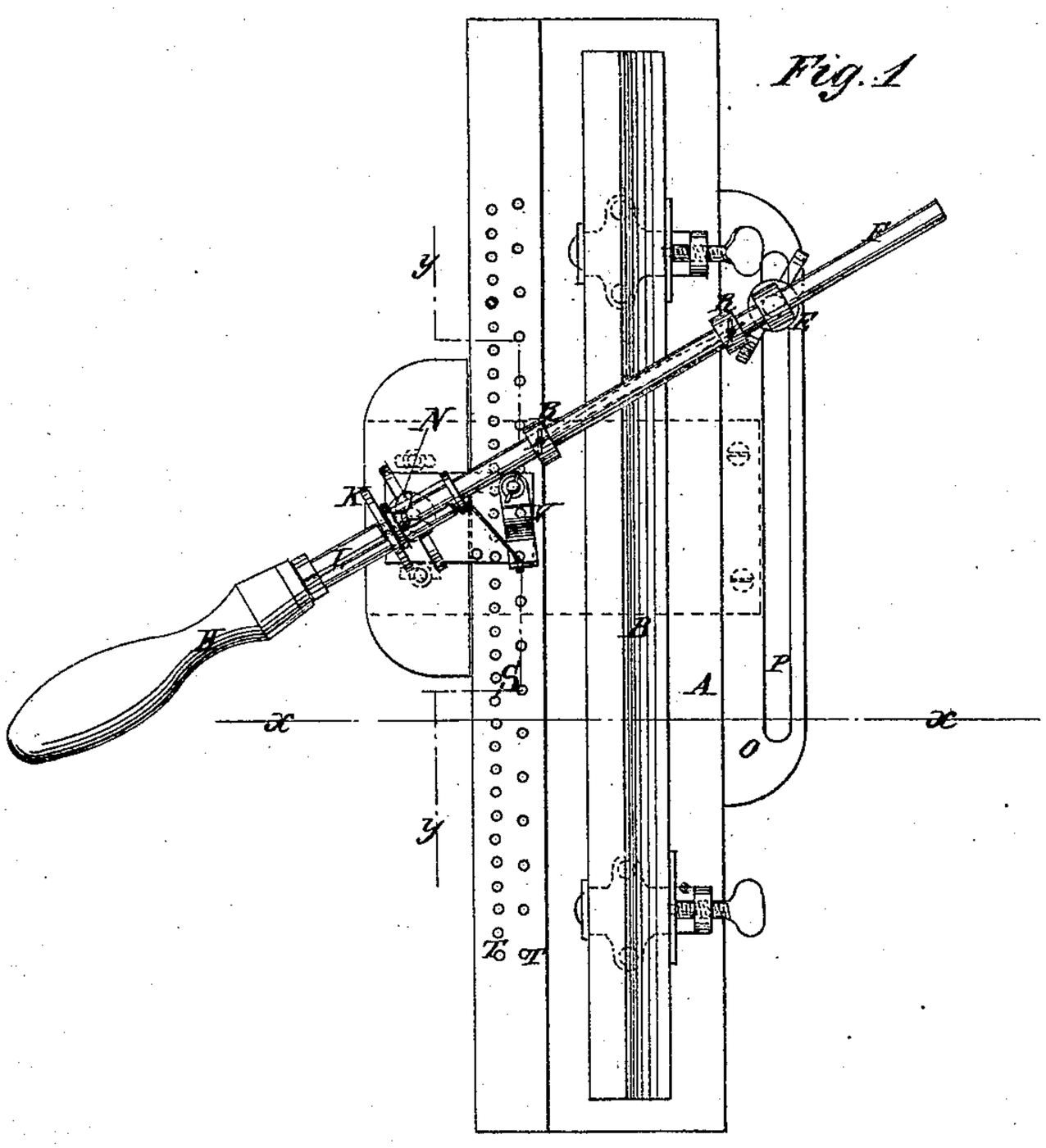


Fig. 2

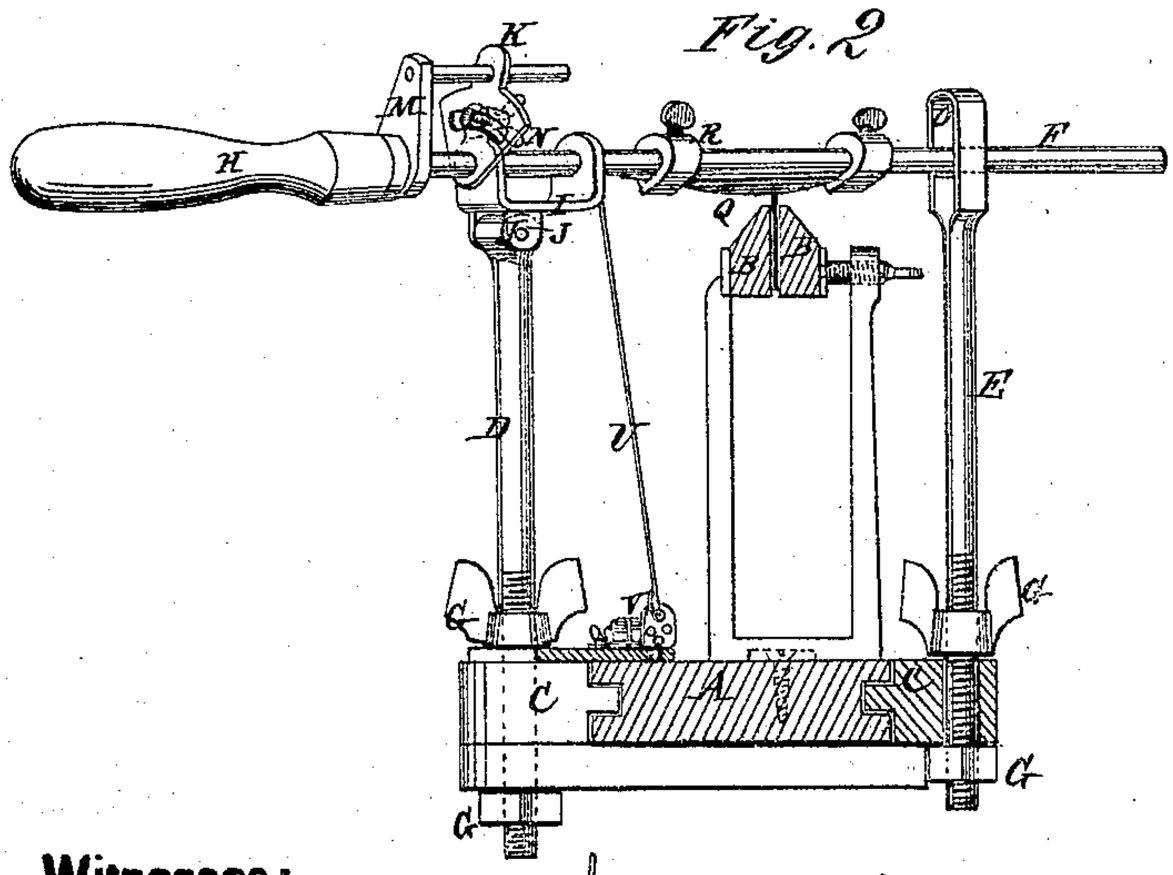
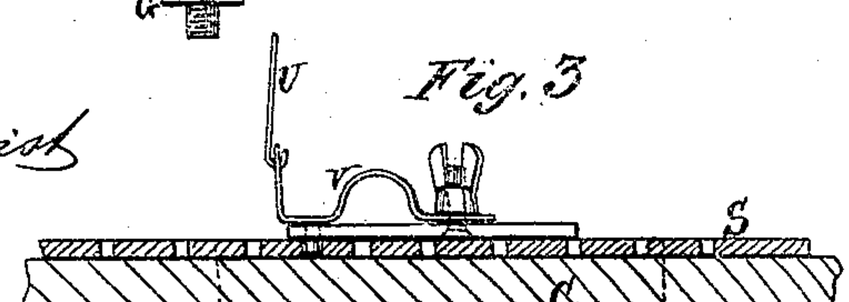


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

DANIEL H. ISEMINGER, OF HEYWORTH, ILLINOIS, ASSIGNOR TO HIMSELF, JAMES C. McFARLAND, AND JACOB JORALEMON, OF SAME PLACE.

IMPROVEMENT IN SAW-SHARPENING MACHINES.

Specification forming part of Letters Patent No. **147,057**, dated February 3, 1874; application filed August 4, 1873.

To all whom it may concern:

Be it known that I, DANIEL H. ISEMINGER, of Heyworth, in the county of McLean and State of Illinois, have invented a new and Improved Saw-Filing Machine, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is a plan view of a saw-filing machine constructed according to my invention. Fig. 2 is a transverse section taken on the line *x x* of Fig. 1, and Fig. 3 is a longitudinal section taken on the line *y y*.

Similar letters of reference indicate corresponding parts.

A is the bed-piece, carrying the saw-clamp B. It is arranged in the platform C to slide forward and backward between the posts D E, on which the file-rod F is mounted above the saw-clamp. These posts are mounted in the platform C, so as to be shifted up and down, to regulate the height of the file-rod to the saw. In this example they are arranged to be adjusted by the nuts G above and below the platform, but any other approved method may be employed. The file-stock F, having a handle, H, at one end, by which to work it by hand, is mounted near the handle in the holder I, so as to slide lengthwise and turn on its axis. The holder is hinged to the top of the post at J. A plate, K, is pivoted on the file-rod, and clamped to the holder, and a guide-rod, L, is fixed in an arm, M, of the file-rod handle, so that by shifting saw-plate along the clamp-screw N, the file may be turned to adjust the face of the file to the teeth, and be fastened and held to them. A slot, O, is provided in the upper part of the post E, in which the file-rod works for a guide, and by the bottom of which the depth of the filing of the teeth is regulated, the downward movement of the file being arrested by said bottom when the rod comes upon it. The post E slides along the slot P, and the post D turns on its axis to shift the file to the reverse bevels of the teeth. The file Q is secured to the side of the file-rod by the ring-clamp R and set-screws. A gage-plate, S, with several rows of holes, T, gaged to the different numbers of teeth to the inch, is employed on the bed-piece, and a spring stop-pin, V, is employed on the platform to arrest and hold the bed-piece as it is shifted along to present the teeth to the file. The stop-pin is connected by a rod or cord, U, to the file-rod, so that when said rod is swung up to lift the file out of the teeth it will pull the pin out of the plate S, and relieve the platform, to allow it to be shifted. The file-rod being dropped as soon as the point of the tooth has passed it, so that the stop-pin rests on the plate, it will be forced by its spring into the hole as soon as the latter comes to it.

A scale may be employed with the plate K, to guide the operator in shifting the file to any predetermined bevel, and to aid in adjusting it alike for the reverse angles of the teeth.

In case a saw having the teeth formed on a curved line is to be filed, the bottom of the slot cannot be relied on to regulate the depth of the filing; therefore I employ a pattern-plate having one edge formed on the same curve, which I fasten in the clamp with the saw, to gage the depth by its edge.

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

The combination, with the hinged file-rod and connecting-rod U, of spring-stop V, connected to the file-rod, so as to release the gage-plate S by lifting the file out of the teeth, substantially as specified.

DANIEL H. ISEMINGER.

Witnesses:
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