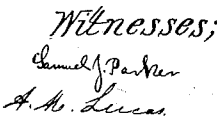


N^o 27,937.

Patented Apr. 17, 1860.



Inventor;
James G. Hipp.

UNITED STATES PATENT OFFICE.

JAMES S. TRIPP, OF DANBY, NEW YORK.

SAW-FILER.

Specification of Letters Patent No. 27,937, dated April 17, 1860.

To all whom it may concern:

Be it known that I, JAMES S. TRIPP, of the town of Danby, in the county of Tompkins and State of New York, have invented an
5 Improved Saw-Filer; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

10 Figure 1, is a perspective view of my saw filer. Fig. 2, are views of the cam and gage that regulates the action of the file, and the depth of the cut of the file. Fig. 3, shows the method of beveling the teeth.
15 Fig. 4, shows the construction of the click or foot that plays in the teeth of the saw, and shapes or spaces them.

In Fig. 1, A, A, are the jaws, that hold the saw. B, is the portion of the rest connected
20 with the slide. B^x is the slide, made fast to the jaws. B, and C, is the rest. D, is the stationary part of the file frame or the file guide. E, is the file frame. F, is the file. G, parts of the file cam. H, the top of the
25 gage attached to the stationary frame D. I, is the angle to regulate the beveling of the teeth; by means of the journal J, upon which the stationary file frame or guide turns, and the pin K, inserted into its proper
30 hole in the rest C. L, is the handle of the click or foot that plays in the teeth. M, is the set screw for the minute setting of the click to the size of the teeth of the saw.

In Fig. 2, F, is the file. E, the file frame
35 out of the stationary frame. G, is the cam, attached to the file frame or holder, for the purpose of bringing the file evenly on the tooth, and checking the action of the file, at the proper instant, when the filing is done;
40 the under or lower surface of G, bearing on the gage H, at the surface H', "side view." The cam is more curved at one end than at the other, to facilitate setting it to different files, by the aid also of the scale G', and the
45 holding knob α^x . The gage H, both checks the file, and receives the action of the cam surface G, α . N, is a slot for the set screw, that attaches the cam to the stationary frame D, and the figure G^x, is the cam alone by
50 itself, with the graduation marked as G^x.

In Fig. 3, D, is the stationary frame of the file or file guide; fixed, by the journal J, on which it turns, to the upper part of the rest C;—and attached to and as a part of
55 I, are the two processes or projections O, O,

having an open space or angle between them; and in said space or angle through the rest C, are holes drilled, in which the pin K, Fig. 1, is put. When the pin is in the hole nearest the journal J, the saw teeth
60 are filed at right angles to the plane of the saw, for that is commonly called "slitting" or "rip teeth"; and when more remote, the saw is beveled. The number of holes, as well as the acuteness of the angle, and the
65 length of the processes or projections admits of variety at pleasure. By alternating the movement of the frame D, on the journal J, so as to bring the file first to one bevel and then to another, as is done when
70 first one projection O, touches the pin K, and then the other projection O, the teeth are with the utmost facility one after another properly beveled; the turning being
75 done by the handle P, Fig. 1, for the succession of tooth after tooth, in connection with the click L.

In Fig. 4, Q, is the saw, L' the click; with the other end L, as the handle by which it is operated, the click is seen bearing
80 in the cavity between two teeth, held by the spring R. S, is the click frame suspended by the set screw T, to a part of the rest.

M, is the set screw for adjusting the file
85 to the size of the teeth of the saw; as by turning the set screw just named the relative distance of the file and the click can be altered to any degree, and fit any tooth of any saw; within the capacity of the saw
90 filer. The frame S, turns on the pivot T. The set screw M, is fast in the knot U; and the nut bolt V, turns as on a journal, at V.

The mode of operating the saw filer is to
95 make fast the saw in the jaws, then commence with the right hand tooth and file; as soon as one tooth is done put the click in it; and adjust the click and file by means of the set screw M; and regulate the depth
100 of filing by the cam and gage; and the bevel of the teeth by the pin and holes described;—the rating of the teeth being accomplished by means of the piece F^x, Fig. 2, when fastening the file in the frame.
105

The adjustments being made, the saw is filed and completed tooth after tooth with the utmost facility; and with mathematical accuracy, by the working of the described
110 parts;—the finished teeth acting as a rack to

feed the rest and file frame along; the file moved by its handle P, Fig. 1;—and other parts; as must be apparent to one skilled in the art to which appertains.

5 I do not broadly claim a saw filer.

I claim—

The specific device described, for beveling

the tooth of the saw; namely the angle I the projections O, O, and the pin K, attached and operated as described.

JAMES S. TRIPP.

Witnesses:

SAMUEL J. PARKER,
S. WARNER.