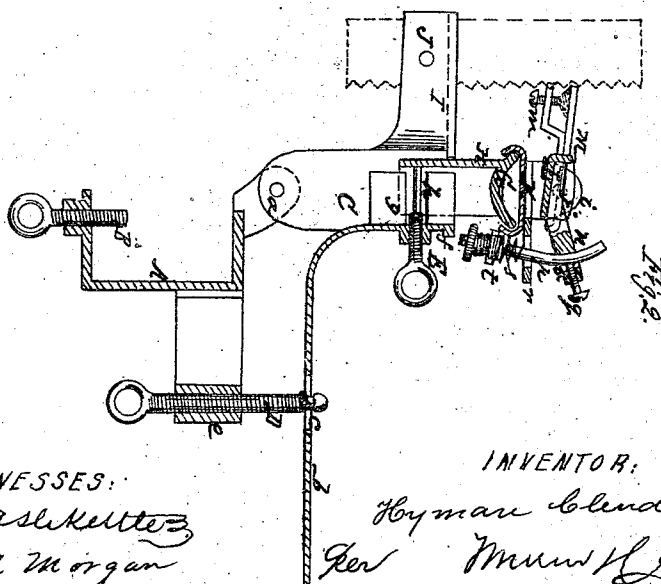
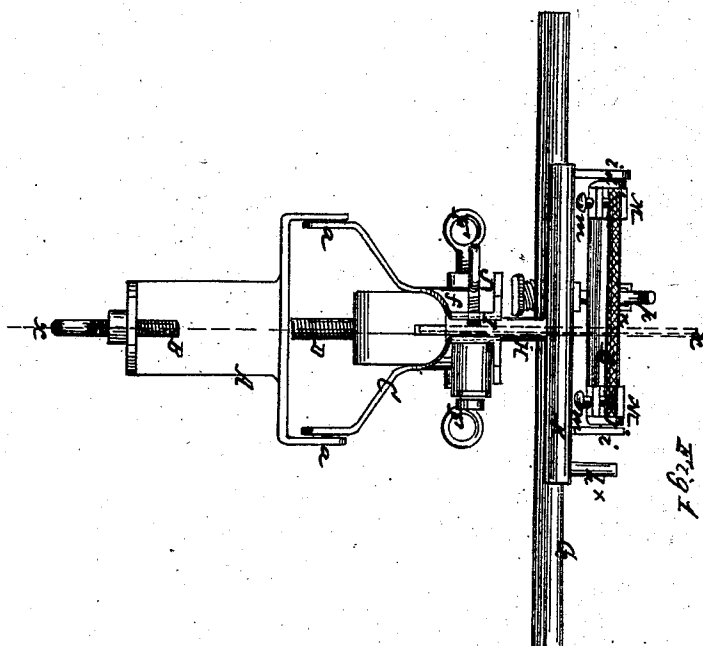


H. Clendenen.

Filing Saws.

N^o 80141

Patented Jul. 21, 1868.



WITNESSES:
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United States Patent Office.

HYMEN CLENDENEN, OF BEVERLY, OHIO.

Letters Patent No. 80,141, dated July 21, 1868.

IMPROVEMENT IN SAW-FILING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HYMEN CLENDENEN, of Beverly, in the county of Washington, and State of Ohio, have invented a new and improved Saw-Sharpener Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved machine for filing or sharpening saws, and it consists in a novel construction and arrangement of parts, as hereinafter fully shown and described, whereby the desired work may be done with the greatest facility and accuracy.

In the accompanying sheet of drawings—

Figure 1 is a front elevation of my invention.

Figure 2 a vertical section of the same, taken in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the base of the machine, which is secured to any suitable fixture by a clamp, B, and C is a frame, which is secured to the base, A, by pivots *a a*, said frame having a bar, *b*, projecting from it about in a horizontal direction, and having an oblong slot, *c*, made in it, in which the top of a screw, D, is fitted, said screw having a groove, *d*, made circumferentially in it to receive the edges of the slot *c*.

The screw D is fitted in a bearing, *e*, attached to the base, and by turning the screw D the frame C may be retained in a vertical or more or less inclined position, as required. This will be fully understood by referring to fig. 2.

The upper end of the frame C is made square, to form a box or socket, *f*, at the inner surface of the front part of which there is an upright projection, *g*, having a slot, *h*, made laterally in it, for a screw, E, to pass through, said screw passing through the front side of the box or socket, (see fig. 2.) A screw, F, similar to E, passes through the two opposite sides of the box or socket.

G represents a horizontal guide or way, which is provided at its centre with a pendent bar, H, which is of V-form in its horizontal section, so that it may be fitted over the upright projection *g* in the box or socket *f*. This pendent bar H, and consequently the guide or way G, may be retained in a higher or lower position, and in a vertical or more or less inclined position, by means of the screws E F F.

The box or socket *f* is made or formed with an extension, I, in which the saw (shown in red) to be sharpened is fitted, and secured in a vertical position, by a set-screw, J.

On the guide or way G there is fitted a slide, K, provided with a handle, *h x*, for the convenience of moving it. This slide K is provided with an upright lug or ear, *i*, near each end, and between these lugs or ears a plate, L, is secured by pivots *j j*.

To the plate L, near each end, there is attached, at right angles, an adjustable bar, M, said bars having oblong slots made in them longitudinally, through which set-screws pass into the plate L; and the front ends of the bars M are forked, to receive a file, (shown in red,) which file is secured in position by screws *m*.

From the above description, it will be readily seen that the teeth of the saw are filed by moving the slide K first in one direction, and then in the other, on the guide or way G; and as the frame C, guide or way, and also the saw, are capable of being adjusted, the file may be adapted to suit the angle required to be given the saw-teeth.

The plate L has an arm, *n*, projecting from it at right angles, and said plate has a hole, *o*, made through it, to receive a curved or segment-rod, *p*, which is secured in the hole *o* by a set-screw, *q*, said segment-rod passing through an arm, *r*, attached to the slide, and having a spiral spring, *s*, upon it, below the arm, and a nut, *t*, upon it below the spring.

By this arrangement the plate L, and consequently the file, may always be kept in a proper relative position with the teeth of the saw, and the file allowed to yield or give, as may be required.

The saw may be raised or lowered, so that the teeth may be filed consecutively by lowering the set-screw J.

I claim as new, and desire to secure by Letters Patent—
The arrangement of the adjustable pivoted frame C, clamp-base A, adjustable way G, slide K, plate L, and bars M, for holding the file, all constructed to operate in the manner and for the purpose substantially as herein set forth and shown.

The above specification of my invention signed by me, this 18th day of February, 1868.

H. CLENDENEN.

Witnesses:

J. C. PRESTON,

PERLEY CHAPMAN.