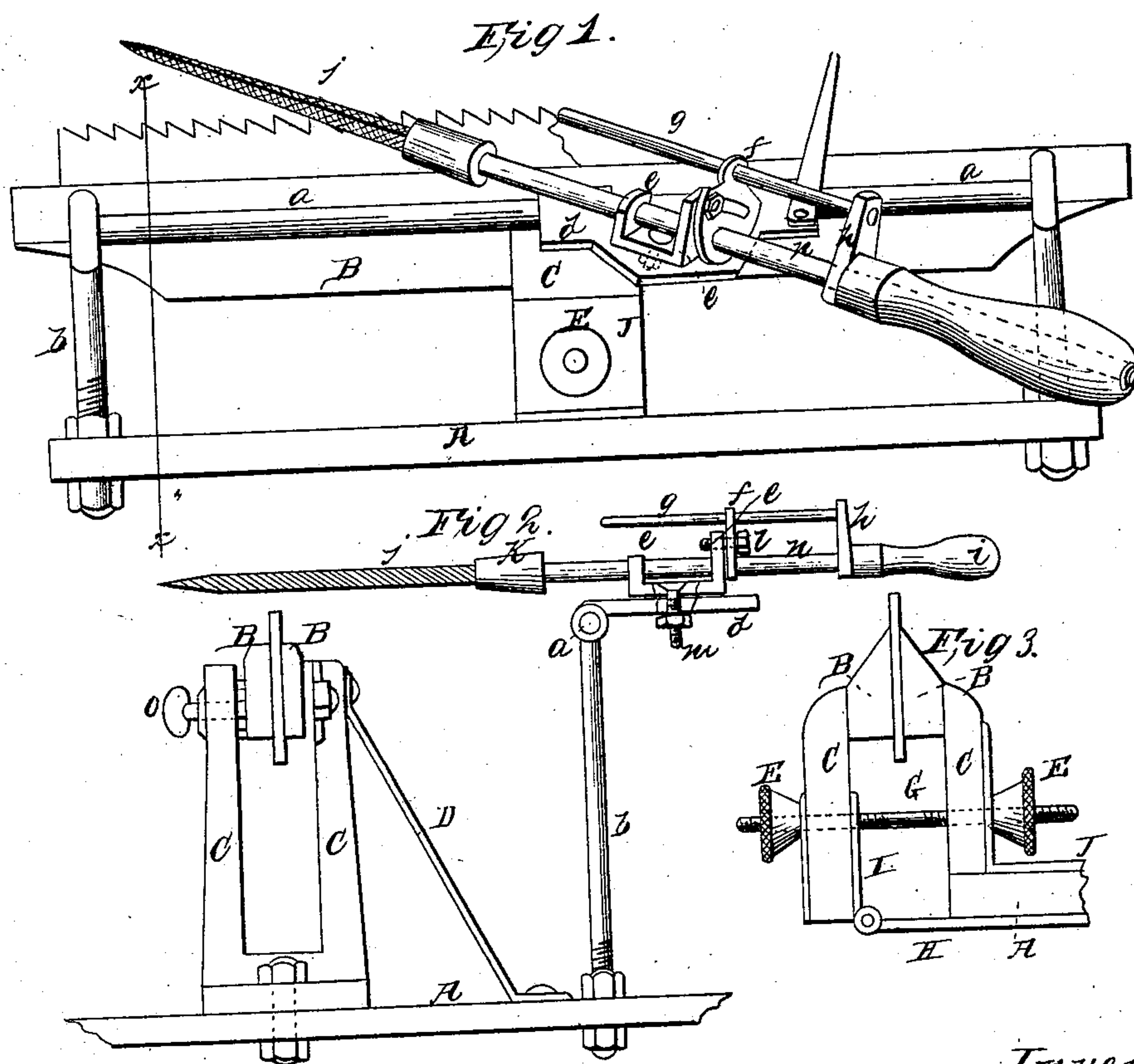


D. H. Isenminger,

Filing Saw.

N^o 83,168.

Patented Oct. 20, 1868.



Witnesses.

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D. H. ISEMINGER, OF McLEAN, ILLINOIS.

Letters Patent No. 83,168, dated October 20, 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, D. H. ISEMINGER, of McLean, in the county of McLean, and State of Illinois, have invented a new and useful Improvement in Saw-Filing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the machine, showing the file-stock in an oblique position.

Figure 2 is a sectional view of the same, showing another method of supporting and closing the clamps.

Figure 3 is a detail section of the clamps through the line *x x* of fig. 1.

Similar letters of reference indicate like parts.

The object of this invention is to provide a simple, and efficient, and conveniently-operated machine for filing the teeth of straight saws; and it consists in the construction and arrangement of parts, as will be hereinafter more fully described.

In the drawings, A is the bed-plate or base of the machine.

C C are uprights, supporting the clamps B for holding the saw, which latter is shown in red color.

The guide-rod *a* is preferably of metal, and is supported at each end by two uprights, *b*, arising from the bed-plate A.

On this guide-rod is a plate, *d*, forming part of the swivel.

The other part consists of a plate having two upright lugs, *e e*.

This plate has free lateral motion on the plate *d*, being held thereon by a single bolt, *m*, the nut of which serves to clamp the two plates together, to hold the file at the desired horizontal angle.

The file-stock proper consists of a handle, *i*, spindle, *n*, and socket, *k*. The spindle or shank *n* is movable to and fro through holes in the lugs *e e* of the upper swivel-plate.

The proper incline to the faces of the file is given by means of the plate *f*, which works loosely on the stem *n*, but is clamped to one of the lugs *e*, with which it is in contact, by a clamp-screw, *l* passing through the said lug, and through an arched slot in the plate *f*, as shown.

The motion of the plate *d* on its guide-rod, and the motion of the lug-plate on it, constitute an unusual adjustage, whereby the file may be given any required longitudinal inclination.

The requisite face-inclination is given by means of the plate *f*, before described, for a small guide-rod, *g*, passing through the plate *f*, to steady the file-stock, so as to hold the file in a fixed position as to the inclination of its faces. This guide-rod projects from an arm, *h*, affixed on the stem *n*, or the handle *i*, and is arranged parallel to the said stem, as shown.

j is the file, set firmly in the socket *k*.

The uprights *b* are each provided with a nut, above and below the bed-plate, to enable the guide-rod *a*, which they support, to be adjusted to the proper height with reference to the saw-clamps.

The clamps B are supported by uprights C C, one of which is affixed to the bed A, and strengthened by an angle-iron, J.

The other clamp is attached to the bed by the hinged plates I H, the former being affixed to the upright, and the latter to the bed, as shown.

A screw-rod, G, provided with burrs, E E, serves to draw the clamps together.

In fig. 2, a modification of the clamp-upright is shown, in which both uprights are rigidly affixed to the bed-plate, and one of the clamps is affixed rigidly to the inner upright, while the other is set up to it by a screw, *o*, as shown; the movable clamps being held by guide-pins or dowels working in holes in outer uprights.

The arched slot in the plate *f* is of sufficient extent to allow the file to be reversed, to bring the opposite face to bear, in filing back again, on the saw.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The construction and arrangement of the bar *a*, swivel-mechanism *d e e*, slotted plate *f*, guide-rod *g*, arm *h*, and file-stock *k n i*, all operating as described, in connection with the saw-clamps B B, for the purpose specified.

D. H. ISEMINGER.

Witnesses:

B. A. FIELD,
J. A. LESLIE.