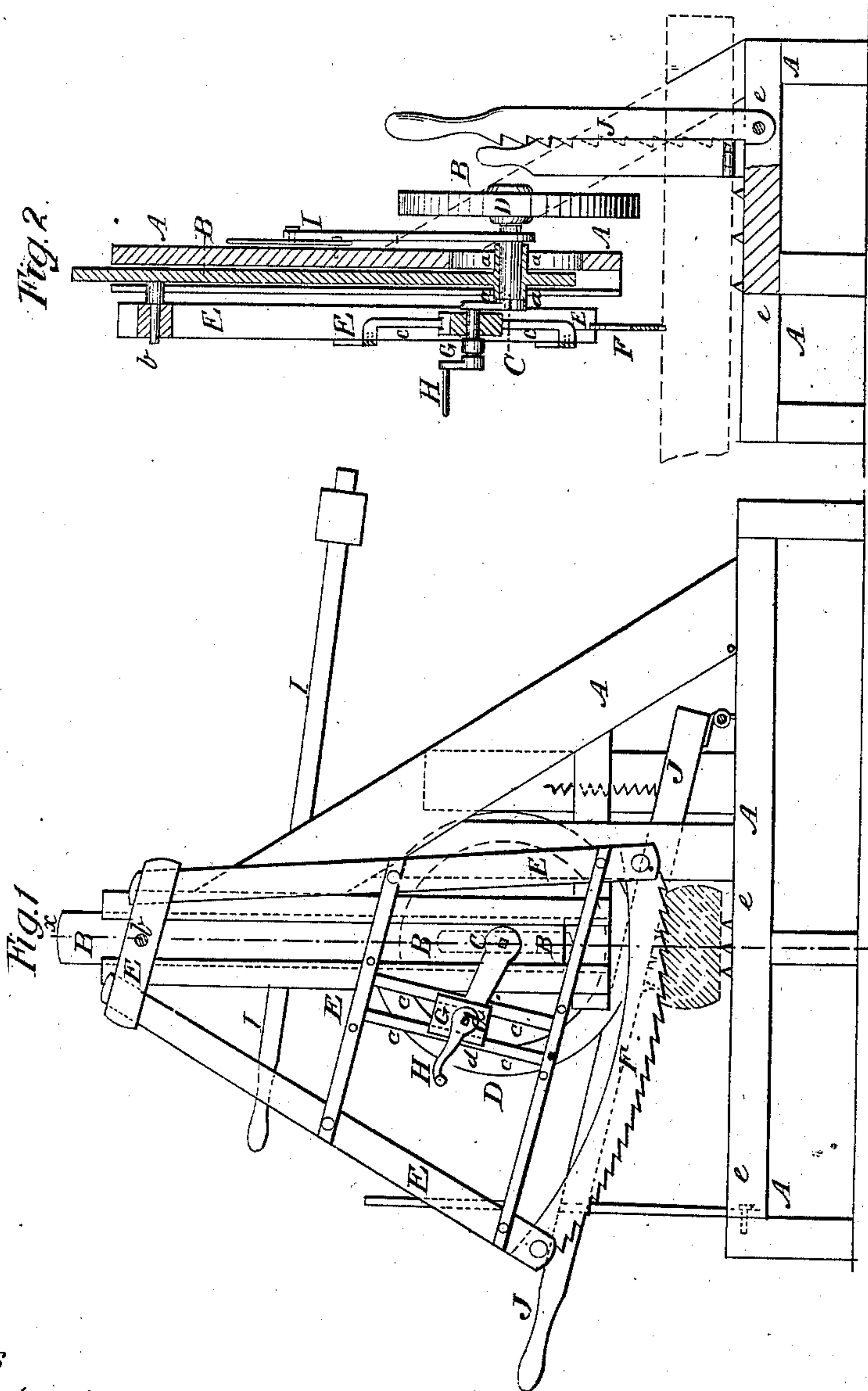


H. A. Daniels,

Drag Saw.

N^o 80,338.

Patented July 28, 1868.



Witnesses
H. C. Ashtetter
Wm. A. Morgan

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HENRY A. DANIELS, OF THOMASTON, CONNECTICUT.

Letters Patent No. 80,338, dated July 28, 1868.

IMPROVEMENT IN SAWING-MACHINES.

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, HENRY A. DANIELS, of Thomaston, in the county of Litchfield, and State of Connecticut, have invented a new and improved Wood-Sawing Machine; 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 a part of this specification, in which—

Figure 1 represents a front elevation of my improved wood-sawing machine.

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

Similar letters of reference indicate corresponding parts.

This invention relates to certain improvements on the wood-sawing machine for which Letters Patent were granted me on the 6th day of November, 1866; and the present invention consists in arranging the bearings of the crank-shaft in the same slide to which the swinging saw-frame is pivoted, so that the distance between the working and swinging centres cannot be varied.

The invention also consists in the use of a reciprocating block, which turns loose on the wrist-pin of the crank, and which slides between two parallel bars, that form part of the swinging frame. The block takes the place of the eccentric employed in my former machine, and works easier than the same.

A, in the drawing, represents the supporting frame of my improved portable wood-sawing machine.

B is an up-and-down sliding bar or plate, which works in upright or inclined guides, so that it can be freely moved up and down therein.

C is a horizontal shaft. The same has its bearings in a tube or hub, *a*, which is formed on the slide B, as is clearly shown in fig. 2. On the shaft C is mounted a fly-wheel, D.

E is a frame, on the lower end of which the segmental saw F is secured, its upper end being, by means of a pin, *b*, pivoted to the slide B, as shown.

In the frame E are arranged two parallel bars, *c c*, between which a block, G, is held that can freely slide between the said bars. The wrist-pin *d*, of a crank formed on the shaft C, passes through this block G, so that when rotary motion is imparted to the shaft C, the block will be carried around in a circle, so as to impart oscillating motion to the saw-frame E, in which frame it adjusts itself by sliding between the bars *c c*.

H is a crank-handle, secured to the shaft C, for imparting the required motion to the same.

I is a weighted lever, for raising the slide and its appendages to allow a block to be placed under the same.

The operation is as follows: The block or log to be sawed is placed upon the platform *e* of the frame A, and is clamped by a lever, J. The shaft is then turned, imparting oscillating motion to the saw, the weight of the slide, saw-frame, and saw causing them to gradually slide downwards as the saw cuts into the log.

The main objection to my aforesaid former invention is, that in the same the saw and its frame and the slide move up and down, while the shaft remains in its bearings in the supporting-frame, whereby the distance between the shaft and pivot of the saw-frame is varied as the latter moves up or down. The operation of the saw becomes thereby irregular, as the leverage is varied, while in my present machine all these defects are overcome.

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

Hanging the shaft C, by which the saw-frame E is oscillated, in the slide B, to which said saw-frame is pivoted, as herein described, for the purpose specified.

HENRY A. DANIELS.

Witnesses:

D. S. PLUME,

J. E. GRANT.