A. W. Townshend,

Sawing Machine.

No. 86,883. Patented Feb. 9. 1869.

Fig: 1.

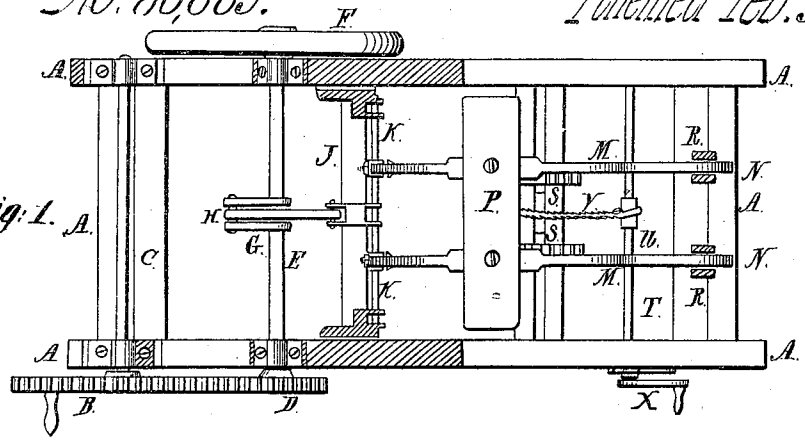


Fig: 2.

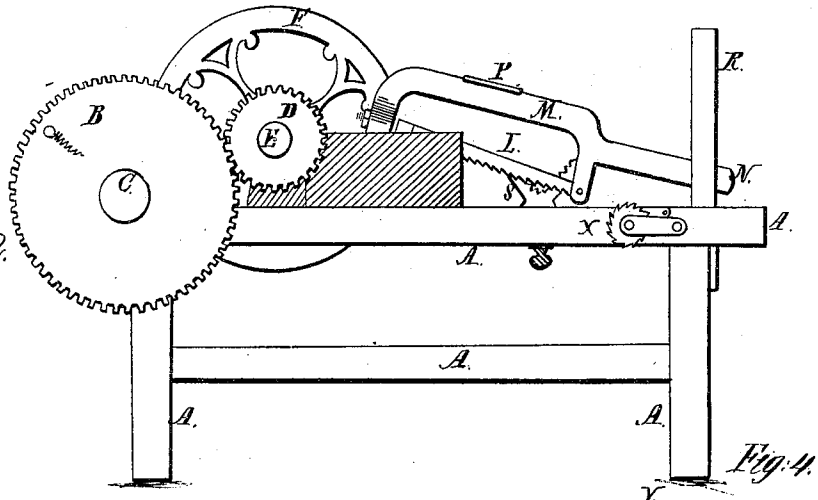
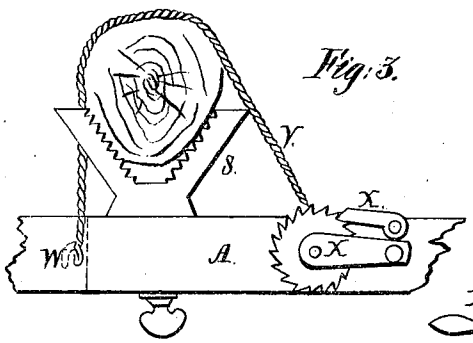
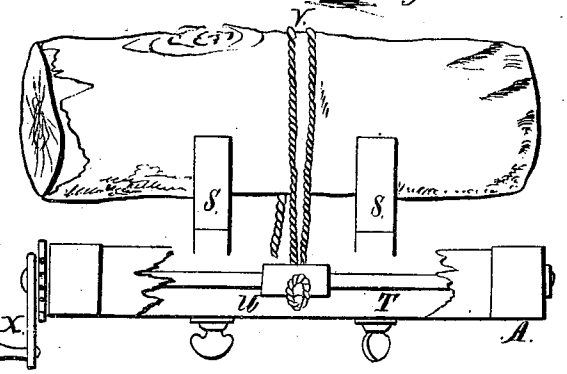


Fig: 4.

Fig: 3.





Witnesses:

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United States Patent Office.

ALFRED W. TOWNSHEND, OF WASHINGTON, DISTRICT OF COLUMBIA

Letters Patent No. 86,883, *dated February* 9, 1869.

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, ALFRED W. TOWNSHEND, of the city of Washington, and District of Columbia, have invented an "Improved Machine for Sawing Wood by Hand;" and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a top view of the machine.

Figure 2, a side elevation of the same.

Figure 3 shows how the wood is secured firmly, by the rope or chain, to the notched wood-rack.

Figure 4, a front view of fig. 3.

The nature of my invention consists in the construction and arrangement of the saws with weights at their front ends, operating in guides, and a weight-plate on top of the saws, that are moved backward and forward by a sliding frame and crank-shaft; also the adjustable wood-fastenings, with the tightening-rope and roller, operated and regulated by a crank, ratchet, and dog.

The object of my invention is to saw wood by hand, in the quickest, easiest, and cheapest manner, so as to enable every housekeeper to possess and use it to advantage.

A represents the oblong frame that supports the saws and the other devices.

B represents the crank and main driving toothed wheel, moving on the one end of its axle, C, and gearing into a pinion-wheel, D, in front, that operates the crank-shaft E and fly-wheel F.

To the crank G, a pitman, H, is attached, by a pivot, and the opposite end of pitman H is also attached, by a pivot, to the sliding cross-frame J, that slides back and forth in grooves in each side of frame A.

In front of this sliding frame J is a round cross-rod, K, to which the saws L L are attached, and operated back and forward by the frame J.

The frames M M of the saws are made of cast-iron, with extension-ends in front, as weights N N, to keep the saws steady, and down to their work.

Another weight-plate, P, is screwed fast across the tops of the saw-frames M, upon which extra weights may be placed when required.

The ends N N of the saw-frames operate in upright guides, R, that are adjustable, wider or narrower apart, by movable screws or pins in the cross-piece of frame A. The angular and notched wood-racks S S are also adjustable, narrower or wider apart, by thumb-screws working in a slot of the frame A.

In front of the wood-racks S is a roller, T, extending across and operating in the sides of the frame A.

In the centre of this roller T are a projecting pin and windlass, U, to which a rope or chain, V, is attached, and the chain is placed across the top of the stick of wood in the rack and fastened to a hook, W, on the opposite side, when the stick is to be sawed; and by means of the crank, ratchet, and dog, X, on the outer end of the roller T, the chain is wound once or twice around the windlass U, to tighten the chain upon the stick of wood, so as to hold the stick perfectly steady in the racks S while the saws are operating, and the chain V is loosened by reversing the crank X and unhooking the chain at W.

The sliding frame J may be operated in the centre of the machine, by the crank G and pitman H, or it may be operated by a pitman at the side of the machine, and the fly-wheel F placed in the centre of the shaft E, instead of the crank G.

One saw may also be used, instead of the two, when deemed necessary, by merely adjusting or shifting one of the saws L, and one of its guides R, to the centre of the machine.

I do not claim wood-saws operated by a slide, cog-wheels, fly-wheel, and crank-motion, as they have been used before; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement, herein described, of weights N N, in front of the saw-frames, with their guides R R, and the roller T, ratchet and dog X, windlass and pin U, rope V, and hook W, when constructed and operating as and for the purposes set forth.

ALFRED W. TOWNSHEND.

Witnesses:

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EDM. F. BROWN.