

J. P. Summer

Fire-Wood Sawing Mach.

Nº 92,124. Patented Jun. 29, 1869.

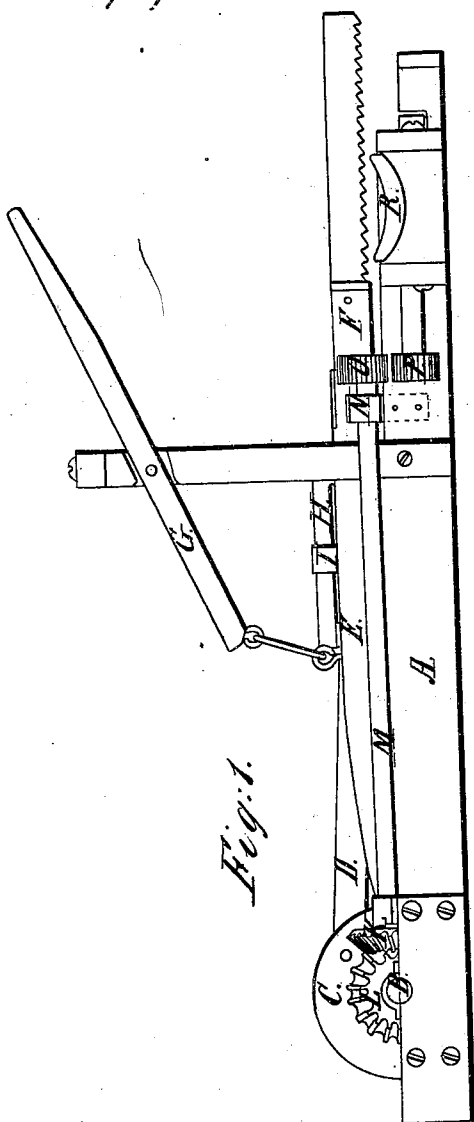


Fig. 1.

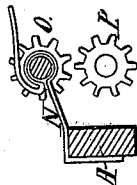
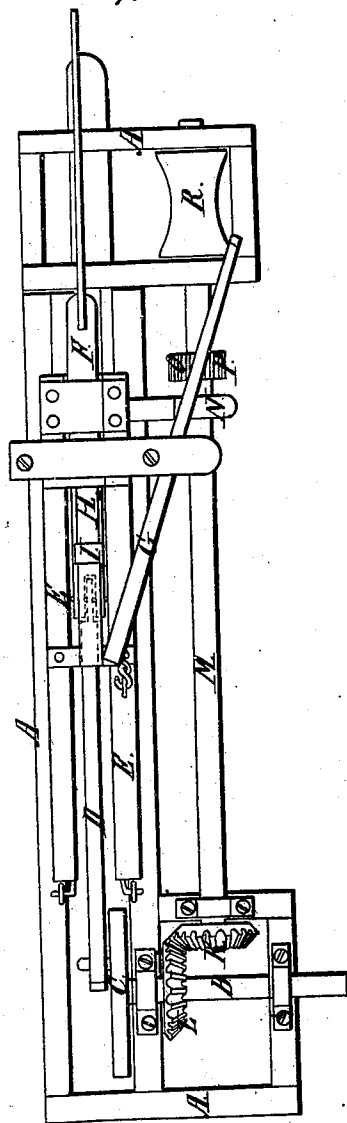


Fig. 3.

Fig. 2.



Witnesses.

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United States Patent Office.

JOHN P. SUMMERS, OF TIFFIN, OHIO.

Letters Patent No. 92,124, dated June 29, 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, JOHN P. SUMMERS, of Tiffin, in the county of Seneca, and in the State of Ohio, have invented new and useful Improvements in Wood-Sawing Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a wood-sawing machine, as more fully hereinafter set forth.

Figure 1 represents a side elevation of my machine.

Figure 2 is a plan view of the same.

Figure 3 is a view of the feed-gear.

Letter A represents the frame of my machine, which may be constructed of any desired shape and size.

At one end of the frame, and placed at right angles with it, is the shaft B, by means of which the motion is communicated to the saw.

Upon the end of shaft is placed the crank-wheel C, to which the pitman D is pivoted.

This pitman is formed of two parts, and is made to operate between the two guides E.

The two parts of the pitman are joined together by means of a bolt, which passes through a sleeve on the end.

To the end of the jointed arm F is attached the saw-blade.

The two guides E, between which the pitman plays, and which guide the saw, have one of their ends hinged on to the frame A, while the other ones are loose, so that they can be lowered or raised to any desired angle, by means of the lever G, which is attached to them.

Rising from the bed-frame, are two uprights, which serve to control and keep the guides in place. To the side of one of these uprights the lever G is pivoted, so that the saw can be raised high enough to come in contact with the cross-piece which connects the uprights, and secured there when it is either not wanted for use, or when it is desired to move the log forward for another cut.

Across the two guides there are placed two metal plates, which are joined together by means of the bar

H. To the pitman-arm F there is attached a guide, I, which passes over and plays backward and forward upon this rod, thus keeping the saw always in a straight line.

Upon the shaft B there is placed the mitre-wheel L, through which the feed-mechanism is operated.

This wheel gears in a second one, K, of similar form and make, upon the end of the shaft M.

One end of this shaft has its bearings upon the frame A, but the other is secured to a spring, so that it can be lowered or raised, so as to operate or move the log forward.

Upon the same end as this spring N, is placed a small cog-wheel, O, which gears in a second one, P, of the same shape and size, on the end of the roller R, upon which the log rests. This roller is hollowed out in the centre, so that the log can be more securely held in place, and has its bearings upon a small frame, placed at right angles with the main one, as seen in fig. 2.

The operation of my machine is as follows:

The motive-power is applied to the shaft B, whereby the saw is set in motion. As soon as the log has been sawed in two, the lever G is drawn downward, the saw raised clear of the log, and then the spring N is depressed, whereby the wheels O and P are made to gear. This starts the roller to revolving, whereby the log is moved forward, and, as soon as far enough, the spring is let go, and the saw again lowered for another cut.

Having thus described my invention,

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

The arrangement, upon the frame A, of the shaft M, spring bearing N, pinions O P, wheels K L, jointed pitman D, guides E E, bar H, slide I, and lever G, all constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 23d day of March, 1869.

JOHN P. SUMMERS.

Witnesses:

ISRAEL LOOSE,

GEO. S. YINGLING.