J. J. THOMAS & W. F. MILLS.

Sawing Machine.

No. 233,126. Patented Oct. 12, 1880.

Fig. 1.

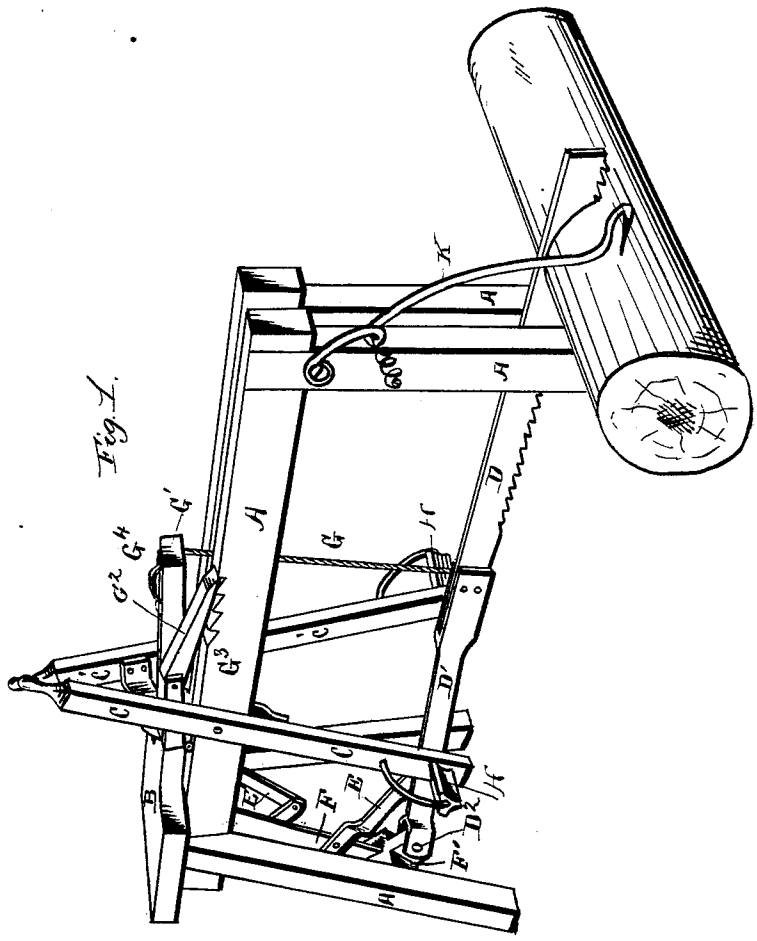
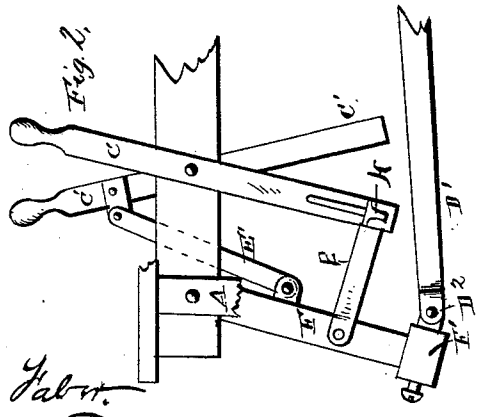


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN J. THOMAS AND WILLARD F. MILLS, OF WELLINGTON, OHIO; SAID MILLS ASSIGNOR TO SAID THOMAS.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 233,126, dated October 12, 1880.

Application filed January 2, 1880.

To all whom it may concern:

Be it known that we, JOHN J. THOMAS and WILLARD F. MILLS, of Wellington, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Sawing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to sawing-machines; and it consists in the following parts and combination of parts, as hereinafter specified and claimed.

In the drawings, Figure 1 is a view, in perspective, of the machine. Fig. 2 is a detail view, showing, in side elevation, the parts which connect the pendulum to the actuating-levers.

In the said drawings, A is a frame for supporting both the operator and the working parts of our device. It may be of any suitable form, construction, or material to suit requirements.

B is a seat for the operator upon the rear portion of the frame A.

C C′ are combined hand and foot levers for operating the saw D. The levers C C′ are pivoted to and swing from the frame A. D is the saw.

The levers C C′ are connected, through links E and E′, to the weighted pendulum F. This pendulum is constructed of any heavy material; or, instead of being thus constructed, any heavy weight, F′, may be attached to its lower end for the purpose of giving it considerable momentum in swinging. By operating the levers C C′ to and fro the pendulum F is swung, and as the saw D has its shank D′ pivoted or jointed to the pendulum F, as represented at D^2, the swinging pendulum will impart to the saw its operative reciprocating movement.

G is a support for preventing the saw from dropping below any fixed or adjusted point. This support is made adjustable by being attached at its upper end to a bar, G′. This bar is hinged at its rear end to the frame A, and to its opposite end is attached the support G. By lifting or lowering the bar G′ the saw will be permitted to fall a less or greater distance, suitable to the depth of cut to be made; and said bar G′ may be fixed in any adjusted position by means of its attached pawl G^2, which may be made to engage with notches G^3 upon the frame A.

H are stirrups attached to the lower end of the lever C C′ for the accommodation of the feet of the operator.

K is a dog attached to the frame A, and constructed in any suitable manner, to hold the log or timber to be sawed in its proper position, and to steady it while being sawed.

The operation of our invention is as follows: The operator, supported by the seat B, places his feet in the stirrups H and seizes with his hands the upper ends of the levers C C′. By moving the levers back and forth the pendulum F is swung to and fro, thereby imparting a reciprocating motion to the saw D. The support G prevents the saw from dropping too low, and this support, as already specified, may be adjusted through the agency of the pawl-and-notch arrangement described.

By lifting the bar G′ through the agency of any suitable handle, G^4, the saw can be raised at any time from its kerf, or can be elevated for any purpose whatever.

What we claim is—

1. In a sawing-machine, the combination, with saw D, shank D′, and pendulum F, having its lower extremity provided with weight F′, to which said shank is pivoted, of levers C C′ and links E E′, said link E having its forward extremity pivoted to the lower extremity of lever C and its rear extremity pivoted to the pendulum, said link E′ having its forward extremity pivoted to the upper portion of lever C′ and its rear portion pivoted to the pendulum at a point above the attachment of link E, substantially as set forth.

2. In a sawing-machine, the combination, with main frame A, having its upper surface provided with longitudinal rack G^3, and lever G′, having its rear extremity hinged to the top of the main frame, of rope or chain G, de-

pending from the forward end of the lever and secured to saw-shank D′, and gravity-pawl G², having its rear extremity hinged to the lever and its forward extremity adapted to engage with the horizontal rack, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOHN J. THOMAS.
WILLARD F. MILLS.

Witnesses:
JAY WOOLLEY,
J. H. WOOLLEY.