

Patented Jan. 24. 1871.

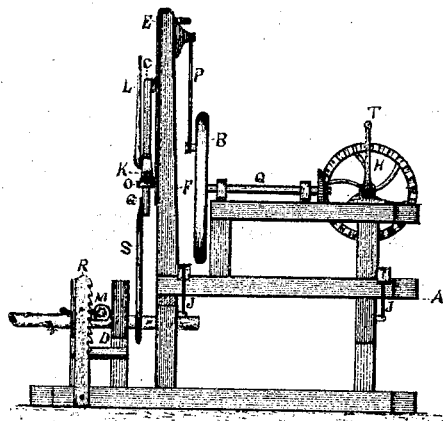


FIG. 1.

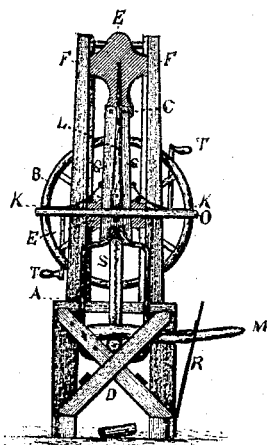


Fig. 2.

Inventor;

James I. Matthews

United States Patent Office.

JAMES D. MATTHEWS, OF NILES, MICHIGAN.

Letters Patent No. 111,131, dated January 24, 1871.

IMPROVEMENT IN SAWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

I, JAMES D. MATTHEWS, of Niles, in the county of Berrien and State of Michigan, have invented certain Improvements in Portable Hand-Sawing Machines, of which the following is a specification.

My invention relates to the construction of a machine in such a manner as to secure at once a buck and log-saw.

Figure 1 is a side elevation of a machine embodying my invention.

Figure 2 is a front view of the same.

General Description.

A is the frame of the machine.

T, the cranks to which power is applied.

H, the gearing.

Q, the shaft, to one end of which the pinion is attached, and to the other end the fly-wheel B is secured, the wrist of which a pitman, P, connects with the slide E, which moves in the upright guides F.

To said slide, at C, the arms of the saws G are secured in such a manner as to permit them to open and close upon each other, being regulated by the feed-springs K when in action.

Said springs have rollers at one extremity, which operate upon the arms G of the saws. The other ends of said springs are secured to the slide O.

The arms G of the saws work freely through a slot in the slide O, and can be thrown apart by means of the lever L.

The stick of wood to be sawed is secured on the buck D by the lever M, said lever being held down by the teeth in R.

The frame of the machine can be separated at A. The upper and lower portions are fastened together by the hooks J.

The machine complete is designed, principally, for sawing cord-wood, as represented in the drawing, but the part above the line A can be removed from the lower portion or buck-frame and be secured to a log by means of the hooks J.

When it is intended to saw logs, straight saws can be inserted in the place of the buck-saws. When the saws are forced apart the rollers on the feed-springs K roll up the arms G of the saws, and would operate thereon with less effect, but being bent up or strained they have more power than when acting in a more direct line upon the arms G at a lower point; hence the power is equalized in either position.

Claim.

I claim as my invention—

The combination of the saws S with the feed-springs K, the slide E, and the gearing F, B, Q, H, and T, substantially as and for the purpose herein set forth.

JAMES D. MATTHEWS.

Witnesses:

CALVIN B. SMITH,
PERLEY HALE, Jr.