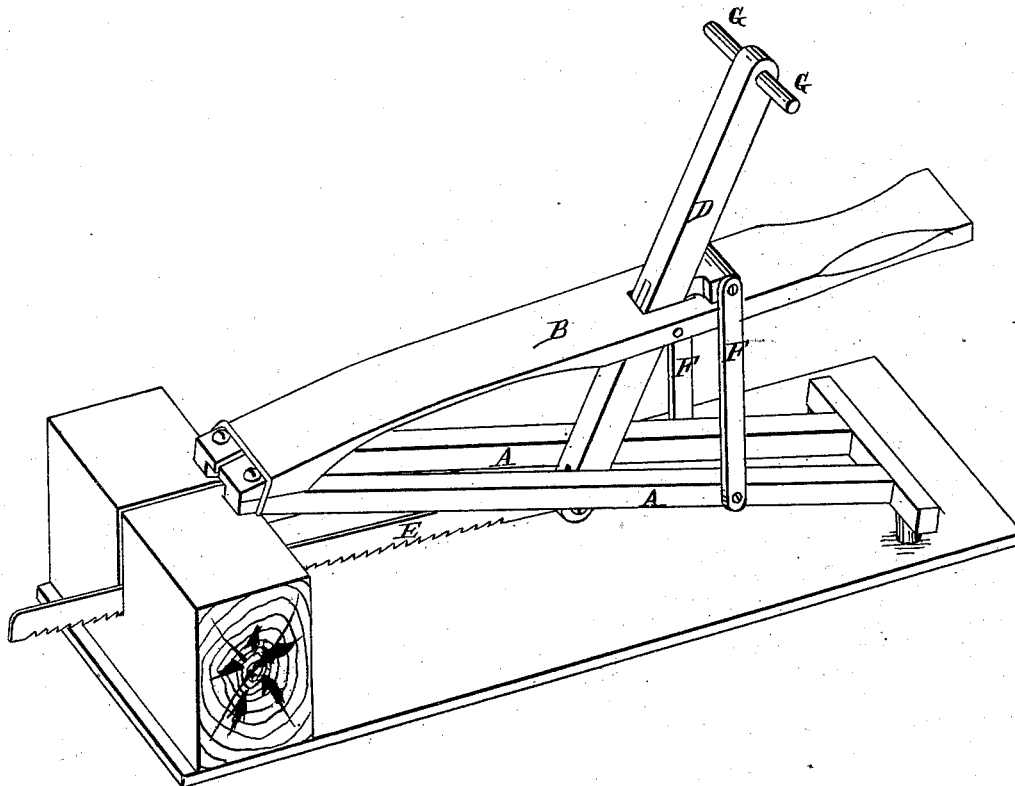


W. W. GILES.
Drag-Sawing Machine.

No. 216,668.

Patented June 17, 1879.



Attest
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His attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. GILES, OF CINCINNATI, OHIO.

IMPROVEMENT IN DRAG-SAWING MACHINES.

Specification forming part of Letters Patent No. **216,668**, dated June 17, 1879; application filed May 10, 1879.

To all whom it may concern:

Be it known that I, WILLIAM WHEETEN GILES, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Sawing-Machine; and I do hereby declare the following to be a full, clear, and exact description of the same, which will enable others skilled in the art to which it appertains to make and use it, reference being had to the accompanying drawing, forming part of this specification, in which the figure is a perspective view of the sawing-machine embodying my invention.

The object of my invention is to provide a simple and portable sawing-machine to be operated by one man sitting upon a spring-board and grasping an operating-lever with his hands, whereby the weight and muscular force of his body is made to operate the saw.

To this end it consists in the combination of a spring-board and operating-lever with the saw and its frame, as I will now proceed to describe.

In the accompanying drawing, A represents a frame, and B the spring or spring-board, secured at its forward end to the front angle of the frame, and extending rearward over the base of the frame, but raised above it. D is the operating-lever, pivoted within a slot of the spring, so as to rise above it in a position to be grasped by the hands of the operator, who straddles the spring in rear of the lever, and rests his feet upon the frame. The lower end of the lever extends downward to or below the frame, and its lower end is pivoted to the saw E, which extends forward through the end of the frame, as shown in the drawing.

The frame and spring may be slotted at their point of connection to serve as a guide to the saw.

F is a bow, link, or stay, pivoted to a rear extension of the operating-lever above the spring, and having its lower end pivoted to the sides of the frame.

When the saw is to be operated the forward end of the frame is placed upon the wood or log to be cut, and its rear end is rested upon the ground, as shown. The operator then takes his seat upon the spring and grasps the handles G of the operating-lever with his hands. By throwing his weight upon the seat and pushing the lever forward at the same time, the seat yields and the saw is drawn backward to cut the log, and by relieving the seat of his weight and pulling backward upon the lever the saw is thrust forward. These movements, being alternately repeated, cause the saw to reciprocate, and thus cut the log. The operator relieves the seat or spring of his weight, so that its elasticity will throw it upward, by bearing with his feet upon the frame of the machine.

The bow serves to steady the movements of the lever and spring, and to assist in throwing the lever backward and forward.

The spring is preferably made of wood, although a metal spring may be added to it, if desired; and instead of connecting the lever directly to the saw, a pitman may be interposed between them.

Having thus described my invention, what I claim is—

1. The frame A, the spring B, the lever D, and link F, constructed and arranged substantially as set forth, in combination with a saw for cutting wood, substantially as described.

2. The combination of frame A, spring-lever B, attached thereto at one end, lever D, pivoted to spring B, and saw attached to the operating-lever, substantially as shown and described.

In testimony of which invention I have hereunto set my hand this 7th day of May, A. D. 1879.

WILLIAM W. GILES.

Witnesses:

N. K. ELLSWORTH,
E. A. ELLSWORTH.