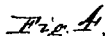
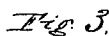
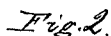
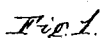


Patented Apr. 11. 1871.



Harry King
Chas. L. Everett.

James B. Sweetland
Alexander Massey

Atty

United States Patent Office.

JEROME B. SWEETLAND, OF PONTIAC, MICHIGAN.

Letters Patent No. 113,703, dated April 11, 1871.

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, JEROME B. SWEETLAND, of Pontiac city, in the county of Oakland and in the State of Michigan, have invented certain new and useful Improvements in Revolving Wood-saw Bucks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "revolving wood-saw buck," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my revolving wood-saw buck attached to or connected with a sawing-machine, on which, however, I claim nothing in this application;

Figure 2 is a plan view of a portion of the pitman of the sawing-machine;

Figure 3 is a longitudinal vertical section; and

Figure 4 is a plan view of the revolving wood-saw buck.

A A represent standards supporting the lower stationary plate B of the saw-buck.

Through the center of this plate passes an upright shaft, C, which has its lower bearing in a suitable box upon the frame of the machine, to which it may be attached, this lower bearing being further so arranged that the shaft may be raised up for a certain height without removing it from the bearing.

At the upper end of the shaft C is secured the upper swinging or revolving plate D of the saw-buck.

Both of the plates B and D are circular, and the upper plate of somewhat larger diameter than the lower.

On the plate D are two V-shaped standards, E E, forming the buck, upon which the wood is laid to be sawed, the inner edges of one or both of said standards being toothed, as shown in fig. 1, so that when the "binder" is brought down on top of the wood it will be held firmly and prevented from turning on the buck.

The binding attachment consists of a lever, G, pivoted to a standard, H, which rises from the swinging plate D, near its edge, the lever crossing the wood at right angles.

On the standard H are several holes, in either one of which the lever G may be pivoted so as to adjust the same to any thickness of the wood desired to be sawed.

The under edge of the lever G is concave and toothed as shown in fig. 1, so that when brought

down and held upon the wood it will, in connection with the toothed standard E, hold the wood firmly.

Directly opposite the standard H is a smaller standard, I, at the upper end of which is pivoted an inverted segmental ratchet, J.

This ratchet passes through a mortise formed in the lever G, and meshes into corresponding notches in the lever, and is secured by means of a cam, α , which is pivoted in said mortise on the lever, and presses against the back of the ratchet.

On the shaft C is a pulley, K, which, by a chain, b , and spiral spring d , is connected with a post or standard of the sawing-machine, for a purpose that will be presently described.

On the stationary plate B, on the upper side, is a lug, e , which fits in either one of two holes made in the plate D, so as to hold this plate steady with either one of the buck-standards E toward the saw.

There is also a lever, L, pivoted to an arm on one of the standards A, which is connected with the shaft C in such a manner that, by raising said lever, the shaft will be raised, at the same time lifting the plate D high enough up to clear the lug e out of its hole.

Supposing the swinging plate D has been turned so as to wind the chain b on the pulley K, the plate D being lowered by the lever L so as to be held in that position by the lug e , then that end of the wood may be sawed off.

Instead of now moving the wood on the standards E it will only be necessary to raise the lever L, when the spring d will cause the plate D with all its attachments to swing around until it drops down with the lug e in the hole on the opposite side, when the other end of the wood may be sawed off.

A pin, f , on the under side of the plate D, striking a lug, h , on the edge of the plate B, prevents the former from swinging too far, but just far enough to get in its proper position.

Having thus fully described my invention,

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

1. An adjustable or swinging buck, operated by means of a spring or its equivalent, substantially as and for the purposes herein set forth.

2. In combination with the shaft C and plate D, the lever L, substantially as and for the purposes herein set forth.

3. The combination of the shaft C, pulley K, chain b , and spring d , constructed and operating substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of August, 1870.

JEROME B. SWEETLAND.

Witnesses:

C. L. EVERT,