(No Model.)

F. W. YOWELL.

DRAG SAW.

No. 304,250. Patented Aug. 26, 1884.

Fig. 1

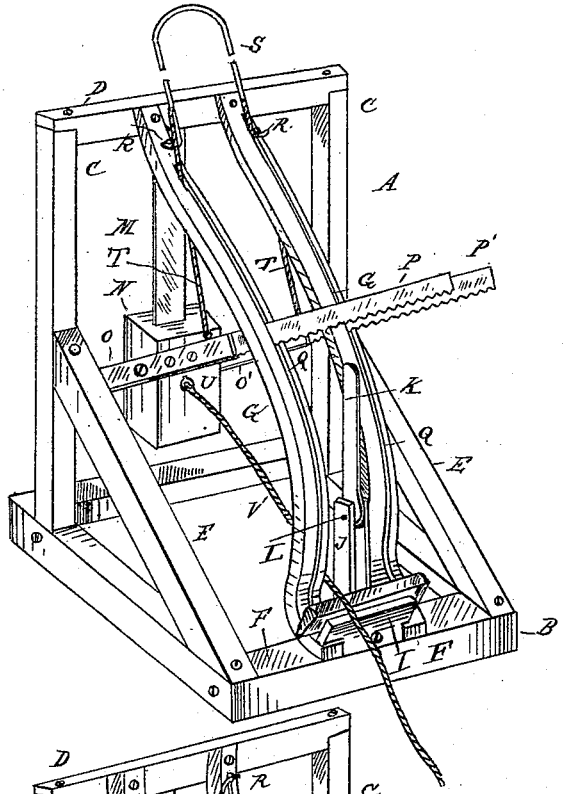
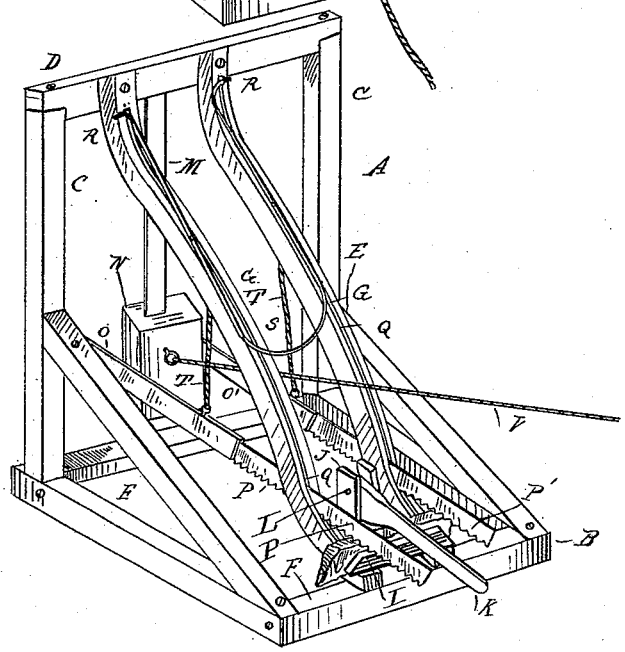


Fig. 2.



WITNESSES

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FIELDING W. YOWELL, OF SIDNEY, IOWA.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 304,250, dated August 26, 1884.

Application filed June 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, FIELDING W. YOWELL, a citizen of the United States, residing at Sidney, in the county of Fremont and State of Iowa, have invented a new and useful Sawing-Machine, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to sawing-machines designed to cut cord-wood and logs into stove-wood, and it has for its objects to produce a machine of the class referred to that shall possess superior advantages over others of its class in point of simplicity, cheapness, durability, capacity for accomplishing a large amount of labor in a short space of time, ease of operation, and general efficiency.

The invention consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

Figure 1 is a view in perspective of my improved sawing-machine in position for putting the stick of cord-wood or log to be sawed into stove-wood in place in the saw-buck, and Fig. 2 is a perspective view of the machine in operation.

Referring by letter to the accompanying drawings, A designates the frame of the machine, consisting of the sills formed into a rectangular bed-frame, B, provided near one end with two uprights, C C, connected at their upper ends by a girder, D, and braced by two inclined braces, E E.

Connected to the sill F at their lower ends and to the front face of the girder D at their upper ends are two curved fenders or saw-guides, G G. These saw-guides G G are kerfed longitudinally nearly their entire length, and the saws P P′ work in these kerfs. These saw-guides G G are placed at proper distances apart to cut the wood the desired length for the stove, and their lower ends form part of the saw-buck. The part I of the saw-buck is secured to the sill F between the saw-guides G G, and its ends project over the feet of the guides, as shown.

At the middle of the sill F, and secured to its rear face, is a standard, J, bifurcated in its upper end to receive the lever K, which is fulcrumed in said bifurcation on a shaft, L. This lever K is used for holding the stick of cord-wood or log in the saw-buck while being sawed. The standard J also forms a part of the saw-buck, as does also the lever when it is pressed down upon the wood.

To the rear face of the girder D is secured, in any suitable manner, a wide flat spring, M, of steel, which is provided at its lower end with a weight, N, which is preferably of wood, rectangular in form, and loaded with lead or other suitable material, to give it the desired weight to impart the necessary momentum to the saws when the weight is oscillated by the sawyer. The saw-handles O and O′ are pivoted to the sides of the weight N, and the saw-blades P P′ extend forward through the kerfs Q Q′ of the saw-guides G G. The saw-guides G G, near their upper ends, are provided with eyes R R, in which is hinged a bail, S, which is connected by ropes or chains T T to the forward ends of the saw-handles O O′. By turning the bail S up backward, as shown in Fig. 1, the saws will be raised up in the kerfs Q Q′ and held up out of the way while the stick of wood or log is being placed in or removed from the saw-buck. When the bail S is lowered again, the saws will rest upon the stick or log. The weight N is provided with an eyebolt, U, in its front face, and to this eyebolt U is connected the rope V, by which the sawyer operates the saws. The sawyer pulls upon the rope V and moves the saws and weight forward or toward him. When the pull has ceased and the rope has been slackened, the spring carries the weight back beyond its vertical normal position, and it returns beyond its normal position by its own momentum, and this, assisted by the pull of the sawyer on the rope, lessens the labor of sawing materially. Press down the lever with the left to hold the wood in the saw-buck and pull on the rope with the right hand, or vice versa.

One man with my improved double saw can do the work of four men with the ordinary crosscut-saw, and it can be done with less exertion. One man can saw from five to seven cords of wood in a day of ten hours without laboring hard. It is a labor-saving machine, and is adapted for working up timber and for mechanics and bridge-builders.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with the frame A, of the curved kerfed saw-guides G G, connecting the girder D and sill F, the saw-buck, as described, the standard J and holding-lever K, the flat spring M, and the weight N at its lower end, provided with the operating-cord V, and the saws P P′, pivoted through their handles to the sides of the weight N, substantially as specified.

2. The combination, with the frame A, provided with the kerfed saw-guides G G, connecting its girder D and its sill F, and the flat spring M, secured to the girder D, and provided at its lower end with the weight N, of the saws P P′, pivoted through their handles O O′ to the sides of the weight N, the bail S, pivoted to the saw-guides G G at R R, and connected to the saw-handles by ropes T T, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FIELDING W. YOWELL.

Witnesses:

M. R. YOWELL,

A. L. KING.