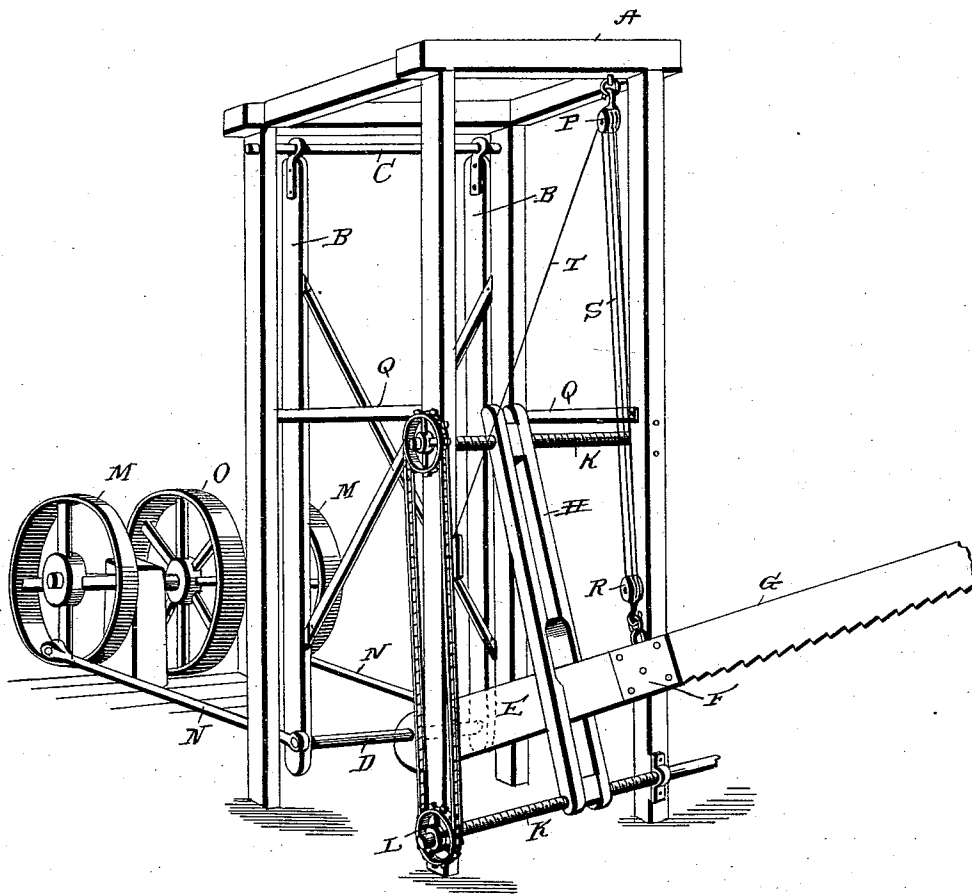


(No Model.)

L. S. WASHBURN.
DRAG SAW.

No. 475,098.

Patented May 17, 1892.



Witnesses:
C. H. Spader
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UNITED STATES PATENT OFFICE.

LORENZO S. WASHBURN, OF NEW ORLEANS, LOUISIANA.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 475,098, dated May 17, 1892.

Application filed June 8, 1891. Serial No. 395,611. (No model.)

To all whom it may concern:

Be it known that I, LORENZO STANLEY WASHBURN, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Drag-Saws; and I do 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 appertains to make and use the same.

My invention relates to an improvement in a drag-saw, and its novelty will be fully understood from the following description and claim when taken in connection with the annexed drawing; and the objects of my invention are to enable logs and mill-timber to be cut any desired length. I attain these objects by the mechanism illustrated in the accompanying drawing, in which the figure is a perspective view.

Similar letters refer to similar parts.

In the drawing, A refers to a frame, which may be of any desired material.

B are arms, which are so constructed as to swing back and forth.

C is a metal rod, to which arms B are attached.

D is a metal rod, which passes through lower end of arms B and also through pitman E.

F is a cast-iron slotted head, in which one end of the saw is placed and held securely in position by means of keys or other suitable devices, which will enable the saw to be readily detached should it be required. This cast-iron head I have found preferable to make, say, about eighty pounds in weight for an ordinary saw.

G is a saw.

H is a movable guide, through which the pitman E projects. This guide consists of two arms and also two nuts placed between the arms. A lateral movement can be given to pitman E by means of two screws K passing through guide-arms H. Said screws are operated by means of a chain passing over sprocket-wheels L.

M are wheels mounted upon a shaft and to which are attached driving-rods N, the opposite end of said rods being attached to the end of rod D. Mounted on same shaft and between wheels M, I place a wheel O, which

is run by a friction-pulley. (Not shown.) A block and tackle is employed for raising and lowering pitman and saw and can be readily disengaged when not in use.

The block P is removably or detachably secured to the top of the main frame, as shown, and a similar block R is secured in a similar manner to the saw-head, the blocks being connected by the ropes S, comprising the block and tackle, and a manipulating-rope T leads off from the upper block.

Q are arms placed in such a manner as to prevent arms B from swinging out of line.

In practice motion is given to wheel O by means of a friction-pulley, (not shown,) and wheels M thus being set in motion rods N impart motion to swinging arms C, thus throwing the power in direct line of the saw and causing pitman E to move back and forth, and as an advance and return motion is thus given the saw, timber desired to be cut is placed under it and it performs the work speedily and satisfactorily.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The sawing-machine herein described, comprising the following instrumentalities in combination: the main frame, the rod C, secured to the rear upper portion thereof, the arms B, depending therefrom, the rod D, connecting the lower ends of said arms, the drive-pulleys, the rods N, connected eccentrically to said pulleys at one end and connected to the rod D at their opposite ends, the reciprocating saw having its pitman E connected to the rod D, the transversely-arranged threaded rods having sprocket-wheels at one end, the sprocket-chain connecting said wheels, the saw-guide comprising two arms with threaded nuts interposed at opposite ends and bearing on the transversely-threaded rods, a block and tackle for vertically adjusting the saw, and suitable means for imparting motion to the pulleys, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

LORENZO S. WASHBURN.

Witnesses:

HELMUTH HOLTZ,
PERCY D. PARKS.