W. A. HODGKINS.

FIRE-WOOD SAWING-MACHINE.

No. 181,343. Patented Aug. 22, 1876.

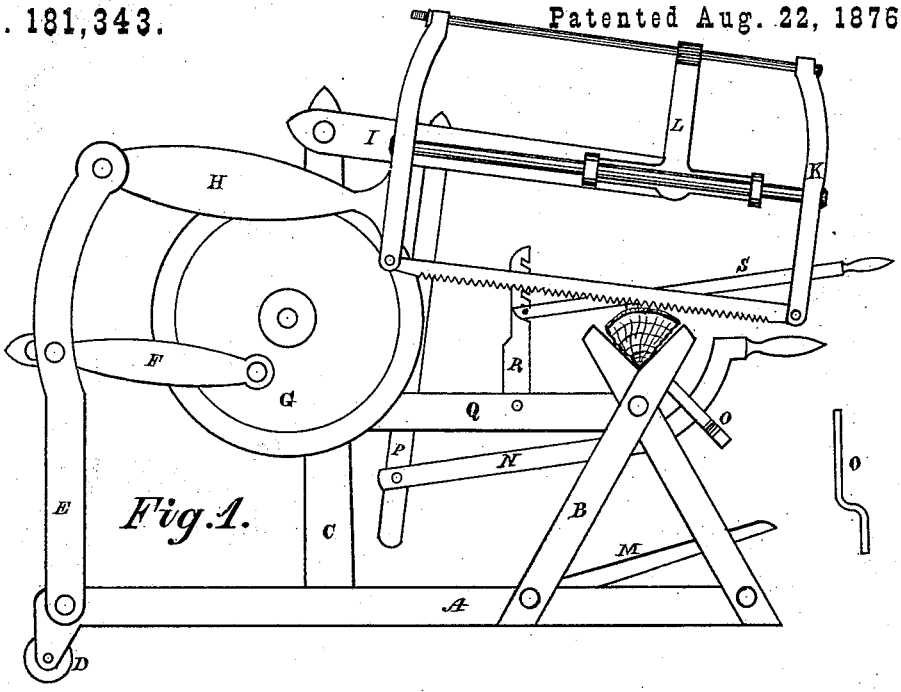

Fig. 1.

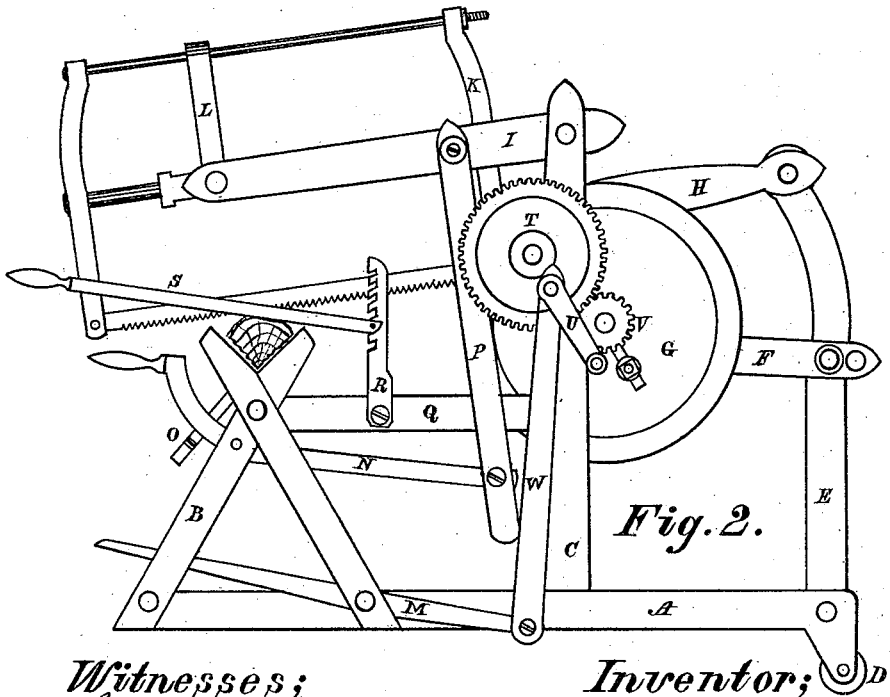

Fig. 2.

Witnesses;
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UNITED STATES PATENT OFFICE.

WILLIAM A. HODGKINS, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN FIRE-WOOD-SAWING MACHINES.

Specification forming part of Letters Patent No. **181,343**, dated August 22, 1876; application filed January 28, 1876.

To all whom it may concern:

Be it known that I, WILLIAM A. HODGKINS, of Lawrence, in the county of Essex and Commonwealth of Massachusetts, have invented an Improvement in Fire-Wood-Sawing Machines, of which the following is a specification:

My invention relates to that class of wood-sawing machines in which the saw and its frame are connected with mechanism for operating the same in sawing fire-wood or logs, and so constructed that it can be operated either by the foot or hand, at the will of the operator.

The following is such a full, clear, concise, and exact description thereof that any person skilled in the art or science to which it appertains can make, construct, and use the same, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon, similar letters indicating corresponding parts in the different figures, in which—

Figure 1 is a side view of my improved machine, showing a saw and frame, a saw-buck, guide, and connecting-arms; Fig. 2, a reversed side view, showing the treadle, its pitman, gear-wheels, crank, lever designed to hold the wood in place, lever with connecting-rod for raising a saw, and catch, designed to hold the same when raised.

A represents a beam or bed provided with a wheel, and designed to hold the saw-buck and frame-work supporting the propelling mechanism in place; B, a saw-buck, designed to hold fire-wood while being sawed; C, a stand, securely mortised to A, and designed to support the mechanism for propelling and guiding the saw; D, a wheel pivoted in the end of A, and designed to assist in moving the same from place to place; E, a lever, securely pivoted to A, and designed to (with its connecting-arms) reciprocate the saw-frame K; F, a connecting-rod, connecting the lever E with the driving-crank of the wheel G; G, a balance-wheel, designed to equalize the motion of the mechanism; H, a connecting-arm, connecting E with K, and designed to impart the reciprocating motion of E to K; I, an arm having one end securely attached to C, and the other holding the guide L, and designed to serve as a means of raising K, as well as a guide to the same; K, a frame, designed to hold a saw; L, a guide, designed to guide the frame K, and allow the same to be raised when in motion; M, a treadle, designed to impart motion to the wheel T, being connected therewith by the pitman W; N, a lever, designed to raise the saw-frame through its connection therewith; O, a catch and spring, designed to hold the saw and its frame in an elevated position; P, a pitman, designed to connect the lever N and arm I; Q, a girder, designed to hold the fulcrum-hook R; R, a fulcrum-hook, designed to hold the lever S, and so graduated with a series of hooks that the lever can be changed from one to the other; S, a lever, designed to engage with the fulcrum R, and serve to hold wood in B; T, a gear-wheel, to which the crank U and the pitman W are attached, and designed to drive the pinion V; U, a crank, designed to impart motion to T; V, a pinion placed on a shaft with G, and designed to communicate motion to the same; W, a pitman, designed to connect the crank with the treadle.

To use my said invention, first raise the saw. Then place the wood or log on the buck, placing the lever above the same, and then put the machine in motion, either by the treadle or crank which reciprocates the saw.

Having thus described my said invention, I claim as new, and desire to secure by Letters Patent, the following, to wit:

1. The combination of the buck B and frame A C Q with the wheel D, the fulcrum R, and its lever S, in a manner substantially as and for the purposes herein described and set forth.

2. The combination of the saw and its frame K with the arm I, the connecting-arm H, the lever E, the arm F, the wheel G, the gear-wheel V and T, the crank U, the pitman W, the treadle M, the pitman P, the lever N, the catch O, the fulcrum R, the lever S, the buck B, and frame A, in a manner substantially as and for the purpose herein described and set forth.

WILLIAM A. HODGKINS. [L. S.]

Witnesses:

GEO. A. DURRELL,

JOSEPH L. BONNEY.