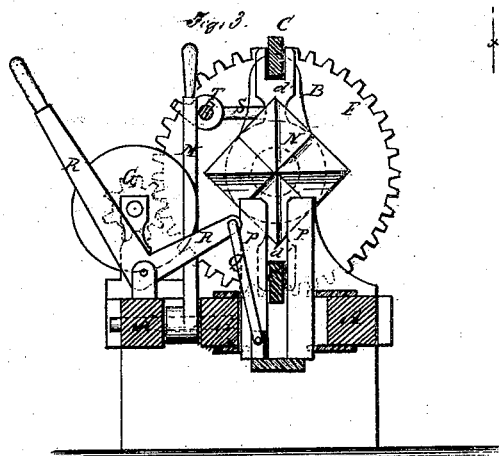


Patented Jan. 31. 1871.



Attorneys

United States Patent Office.

FRANK FICHT, OF DYCKESVILLE, WISCONSIN.

Letters Patent No. 111,333, dated January 31, 1871; antedated January 29, 1871.

IMPROVEMENT IN MACHINES FOR SPLITTING WOOD.

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, FRANK FICHT, of Dyckesville, in the county of Kewaunee and State of Wisconsin, have invented a new and useful Improvement in Wood-Splitting Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved machine.

Figure 2 is a top view of the same, part being broken away to show the construction.

Figure 3 is a vertical cross-section of the same taken through the line *x x*, fig. 2.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine for splitting cord-wood, shingle-bolts, and other short wood, and which shall be simple in construction, effective in operation, and conveniently operated; and

It consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A is the base-frame of the machine, to the end parts of which are attached the lower ends of the standards B.

C are two parallel bars that form the slide or ways of the machine, which are placed the one above the other, and the ends of which are attached to the upper and lower parts of the standards B, as shown in the figures.

D is a block, upon the ends of which are formed arms *d*, the ends of which are notched to receive the bars C, upon which the said block slides back and forth.

E is a screw which is swiveled to one of the standards, B, and which fits into the screw-thread cut in the surface of the longitudinal perforation of the block D, so that the said block may be moved back and forth by revolving the screw E.

To the projecting rear end of the screw E is attached a large gear-wheel, F, the teeth of which mesh into the teeth of the small gear-wheel G, which is attached to the end of the shaft H.

The shaft H revolves in standards I attached to the base-frame A, and upon it are placed two loose pulleys, J, which are revolved in opposite directions by belts.

Upon the shaft H, between the pulleys J, is placed a sliding clutch, K, which may be thrown into gear with either of the pulleys J by being slid upon the said shaft H, to revolve the screw E in either direction, as required.

L is a lever, the end of which is turned up at right angles, and forked to ride in a groove in the clutch K. The lever L slides longitudinally in a slot in the standard I, and its other end is pivoted to the lever

M, the lower end of which is pivoted to the frame A, and its upper end projects upward into such a position that it may be conveniently reached and operated by the attendant.

To the forward end of the block D is detachably attached the cutter-head N, which may be made with a single cutting-edge to divide the block being split into two parts. Or it may have four edges meeting each other at right angles to divide the block into four parts. Or it may have six cutting-edges. In either case the cutters should be made wedge-shaped, to make them more effective in splitting the wood.

O is a point attached to the standard B, directly in front of the central line of the cutter-head N, to support the forward end of the block while being operated upon by the cutter-head N.

The block to be split is laid upon the rest P, which is slotted for the passage of the lower bar C, and to the base of which is pivoted the lower end of the connecting-bar Q, the upper end of which is pivoted to the short arm of the bent lever R, which is pivoted at its angle to the base-frame A, and its long arm projects upward into such a position that it may be conveniently reached and operated by the attendant to raise the rest P and with it the block to be split.

As the cutter-head N takes hold of the block to be split the rest P is allowed to drop back out of the way.

S is an arm attached to the sliding head-block D and extending parallel with the bars C, and to which are keyed or otherwise adjustably attached stops T, which should be secured to the said arm S in such positions that they may strike against the lever M and change the motion automatically before the cutter N or head-block D can come in contact with the frame-work of the machine, thus guarding against the accidental breakage of the machine from the carelessness of the attendant.

Having thus described my invention,

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

1. The combination of the swiveled screw E, sliding head-block D *d*, cutter N, and center pin or point O, with the ways or bars C, standards B, and base-frame A, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the rest P, connecting-rod Q, and bent lever R, with the base-frame A, standards B, slides or bars C, sliding cutter-head D *d*, cutter N, and center point O, substantially as herein shown and described, and for the purpose set forth.

3. The combination of the arm S and adjustable stops T with the sliding cutter-head D *d* and with the lever M, substantially as herein shown and described, and for the purpose set forth.

FRANK FICHT.

Witnesses:

ABNER BAKER,

LLEWELLYN BAKER.