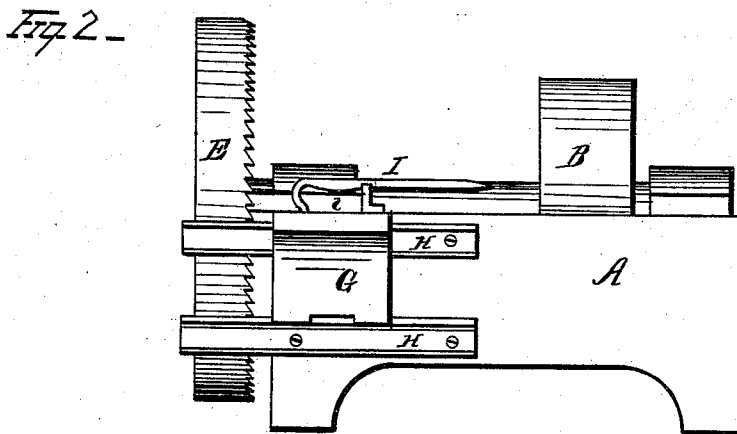
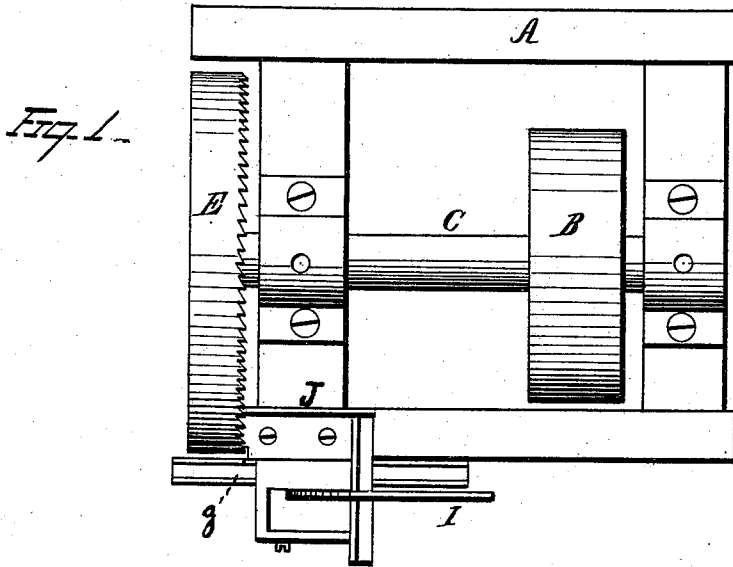


E. R. OSGOOD.

MACHINES FOR CUTTING KINDLING-WOOD.

No. 174,285.

Patented Feb. 29, 1876.



WITNESSES
E. J. Nottingham
F. O. Mc Cleary
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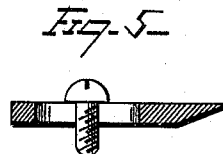
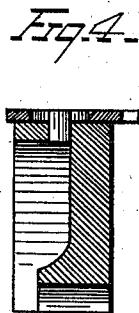
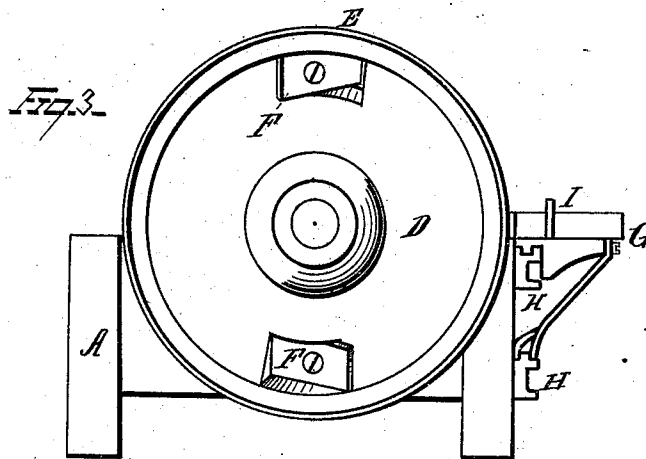
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UNITED STATES PATENT OFFICE.

ELIJAH R. OSGOOD, OF COLUMBUS, OHIO.

IMPROVEMENT IN MACHINES FOR CUTTING KINDLING-WOOD.

Specification forming part of Letters Patent No. **174,285**, dated February 29, 1876; application filed January 20, 1876.

To all whom it may concern:

Be it known that I, ELIJAH R. OSGOOD, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Machine for Cutting Kindling-Wood; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved machine for cutting kindling-wood; and consists in the combination of devices and appliances as hereinafter set forth and claimed.

In the drawing, Figure 1 is a plan view of a machine embodying my invention. Fig. 2 is a side view on the side of the machine adjacent to the feeding-table. Fig. 3 is a front elevation against the face of the wheel bearing the saw. Fig. 4 is a sectional view through one of the clamps that attaches the saw to its wheel. Fig. 5 is a sectional view through one of the splitting-knives.

A is a frame for supporting the mechanism. B is a drive-wheel, or any other suitable power attachment for driving the shaft C, to which is attached the saw-wheel D. This saw-wheel D presents a smooth face toward the kindling-wood, at least along that portion where the kindling-wood impinges against it. To the periphery of this saw-wheel D is fastened, by rivets or otherwise, the band-saw E, presenting its teeth in a direction to project at right angles from the plane of the saw-wheel D. F are splitting-knives, which project from the face of the saw-wheel D, for the purpose of splitting the kindling. There may be any desired number of these splitting-knives F. The machine represented in the drawings has two such knives. G is a sliding frame, for carrying the kindling-wood to be sawed and split forward to the saw and splitting-knives. It is arranged to slide in a guide-frame, H. I is a clamping-lever, with a toothed edge, *i*, which acts as a dog to hold the wood firmly in the frame G while being fed to the saw and splitting-knives. J is a guide or gage, which gages the length of the kindling-wood.

The operation of the device is as follows:

The piece of wood which is to be sawed up and split into kindlings is inserted in the frame G and clamped by the clamp-lever I. The frame is then fed forward against the saw and knives by sliding it in the frame H. The wood having been fed forward against the guide J, it is fed up against the saw, the teeth of which project out beyond the splitting-knives F. As the saw saws its kerf into the wood, the wheel D, in its revolution, brings the knives F successively against the wood, splitting it off nearly to the depth of the kerf, each knife severing a piece of kindling from the main piece; and there will, therefore, be as many pieces of kindling-wood severed in each revolution of the wheel as there are splitting-knives F on the said wheel.

It will be seen that the face of the frame G is recessed at *g* just enough to permit the saw-teeth to completely sever the wood. After one cut has thus been made, the table G is drawn back, the wood is pressed forward again until it strikes the gage J. It is then clamped by the lever I, and the operation is repeated, as before.

The saw E is fastened to the periphery of of the wheel D, preferably by clamps passing through slots in the said saw, the object being to permit its being fed forward as it is worn away by gumming or filing, which may be done by simply loosening the clamps, adjusting the saw, and then tightening the clamps again.

So, also, the splitting-knives are, preferably, adjusted by means of the slot and clamp, so that they may be fed forward as worn. The sliding frame G may be pushed forward by hand, or suitable foot-lever attachment may be made, whereby it can be pressed forward by foot-leverage.

The band-saw E is represented as being in a continuous length; but it is evident that it may be made in sections, if desired, to facilitate repairs in case of breakage, &c.

What I claim is—

1. In a kindling-wood cutter, the combination of the wheel D, provided with the projecting band-saw E and the splitting-knives F, with a fixed table or support that projects beyond the extreme cut of the saw, whereby

the partly-severed block is supported to receive the stroke of the cutters, substantially as and for the purpose set forth.

2. The combination, with the wheel D, provided with the projecting band-saw E and the splitting-knives F, of the fixed table and a sliding table arranged to be reciprocated thereon, said sliding table having the clamp I hinged thereto, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELIJAH R. OSGOOD.

Witnesses:

JOHN H. HEITMANN,
A. W. KRUMM.