A. D. Hoffman,

Circular Saw

No. 27,053. Patented Feb. 7, 1860.

Fig. 1

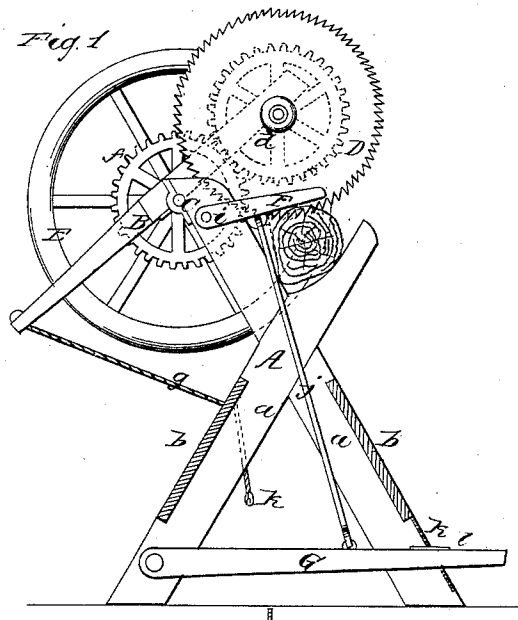
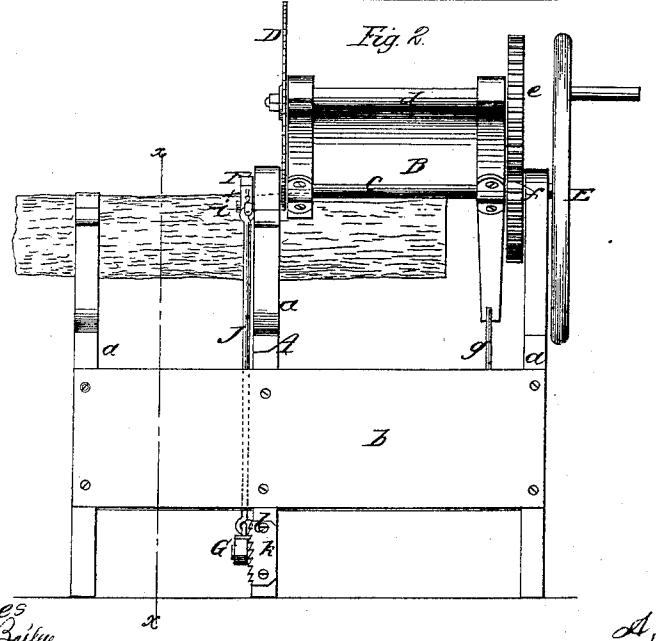


Fig. 2.



Witnesses
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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

A. D. HOFFMAN, OF BELLEVILLE, MICHIGAN.

CROSSCUT-SAWING MACHINE.

Specification of Letters Patent No. 27,053, dated February 7, 1860.

To all whom it may concern:

Be it known that I, A. D. HOFFMAN, of Belleville, in the county of Wayne and State of Michigan, have invented a new and Improved Device for Sawing Wood; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional view of my invention taken in the line *x*, *x*, Fig. 2; Fig. 2, a front view of ditto.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a simple and efficient machine for sawing wood transversely for fuel, designed chiefly for manual operation.

The invention consists in the employment or use of a circular saw attached to a hinge or jointed bed and arranged in such relation with a "buck" or wood holder as to effect the desired end.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents a framing formed of cross bars *a*, connected by plank *b*, or other suitable stuff and resembling the ordinary "buck" as it is commonly termed for holding wood while being sawed transversely for fuel. To the upper part of this "buck" at one side a bed B, is secured by a joint which may be formed by attaching the bed to a shaft C, and allowing the former to swing on the latter. Under the front part of the bed B an arbor *d*, is placed, said arbor having at one end a circular saw D, and on the opposite end a toothed wheel *e*, the latter gearing into a wheel *f*, on the shaft C, which has a fly wheel E, at its outer end. The back end of the bed B, is provided with an arm which has a rope *g*, attached to it, said rope passing down and through the buck plank *b*, and having a knot or button *h*, at its end as plainly shown in Fig. 1.

To one of the center cross bars *a*, of the "buck" a lever F, is attached by a pin or bolt *i*, and is allowed to work or turn freely thereon. This lever has a rod *j*, attached to it the lower end of said rod being connected to a treadle G, the front end of which may be secured or retained at any desired point by means of a rack *k*, secured to the lower part of the framing and by the side of the front part of the treadle on the upper surface of which a plate *l*, is secured that catches into the rack.

The operation is as follows: The bed B is thrown upward and also the lever F, and the stick to be sawed, shown in red, is placed on the framing or "buck" and the lever F, forced down thereon by pressing the foot on the treadle G, the latter being secured down by means of the plate *l*, catching in the rack *k*. By this means the log is firmly secured in the framing or "buck." The bed B is then turned down so that the saw D, will rest on the log or stick and the shaft C, is turned by means of a handle attached to the fly wheel E, and motion is communicated to the saw D, by means of the gearing *e*, *f*. The saw D, as it rotates is fed to its work by the gravity of the bed B, the saw also having a tendency to feed itself by its rotation and its action on the stick or log. When the stick or log is cut through the piece drops, the bed being retained by the knot or button *k*, of rope *g*. The treadle G, is then released from the rack *k*, the bed B, thrown upward, the log adjusted for a succeeding cut, the lever F, again pressed down on it, and the bed B turned down as before and the shaft C, rotated and the second cut made.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, for the purpose specified, is—

The combination with the buck A, of the pivoted self acting bed or saw carrier B, gears (*e f*) lever F, and treadle G, as and for the purpose herein shown and described.

A. D. HOFFMAN.

Witnesses:

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