

G.M.D. & B.E. Harreld.

Wood Sawing Mach.

N^o 87,100.

Patented Feb. 23, 1869.

Fig. 1.

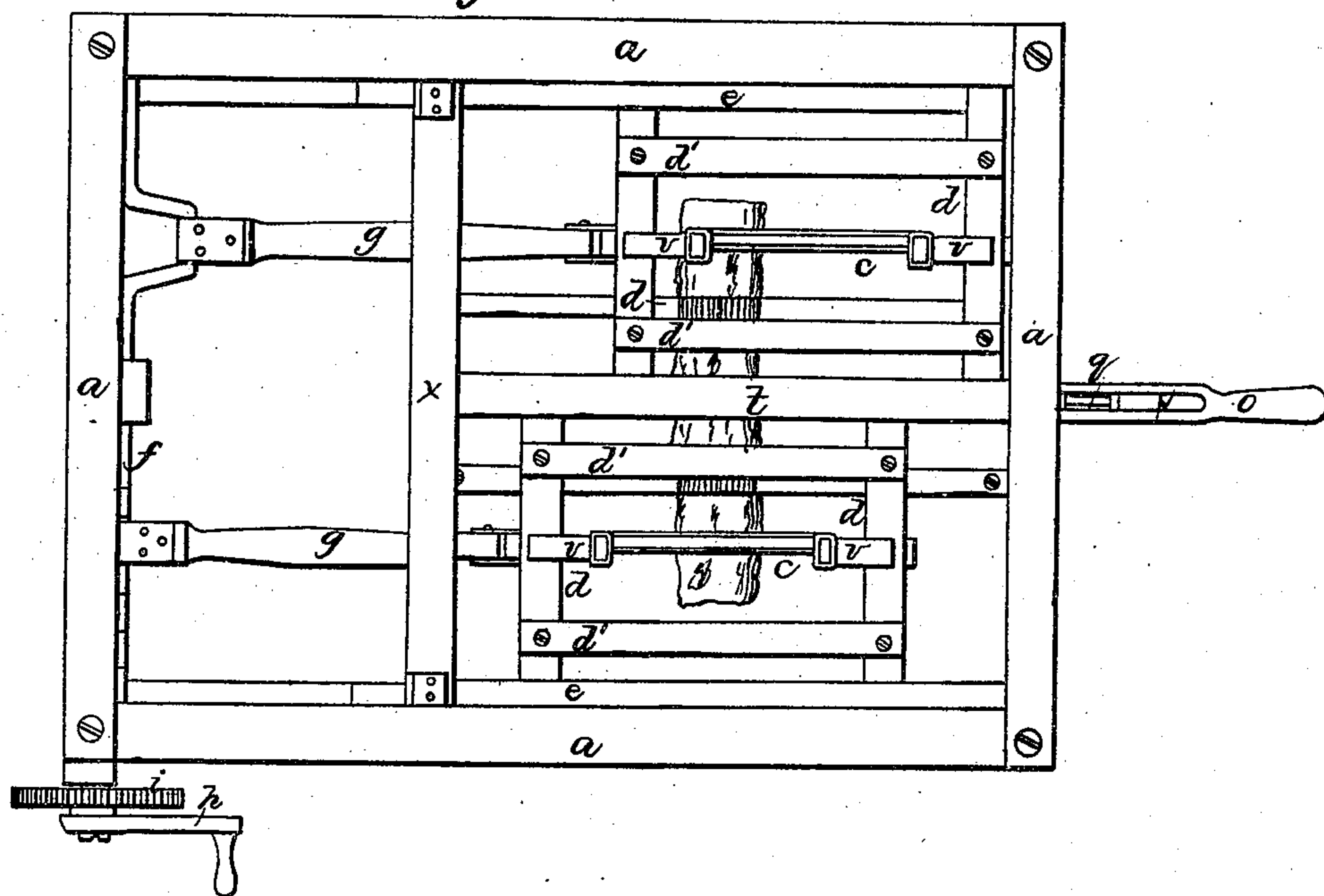
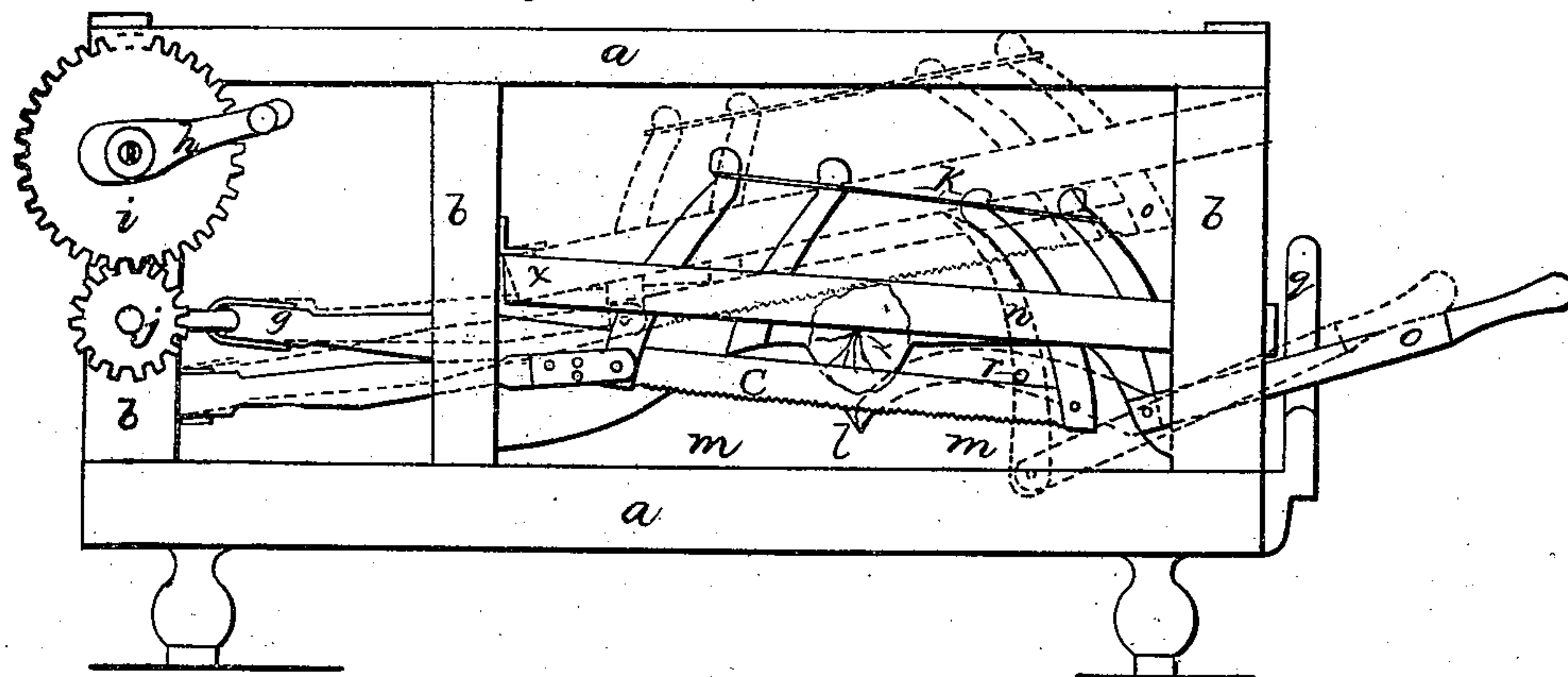


Fig. 2.



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G. M. D. HARRELD AND B. E. HARRELD, OF WASHINGTON, IOWA.

Letters Patent, No. 87,100, dated February 23, 1869.

IMPROVEMENT IN WOOD-SAWING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, G. M. D. HARRELD and B. E. HARRELD, of Washington, in the State of Iowa, have invented a certain new and useful Improvement on Machines for Sawing Wood; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters and marks thereon, which said drawings form part of this specification, and represent a machine constructed under our invention,

Figure 1 being a top view, and

Figure 2 being a side view thereof.

In both of these figures, where like parts are shown, like marks and letters are used to indicate the parts.

This machine is intended for sawing logs or wood into sticks of such length as may be required for any purpose for which such sticks may be used.

The several parts or devices making up the machine are secured or attached to suitable bars, of a rectangular frame, *a a* being the horizontal bars thereof, and *b b*, the vertical or upright bars.

The saws *c c* are in frames *d d*, which are made to traverse in grooved guide-bars, *e e*, by suitable power applied to the double crank-shaft *f*, the rods or pitman *g g* connecting the saw-frames to the crank-shaft.

This crank-shaft has suitable bearings in the vertical bars *b b*, and may be rotated by the hand-crank *h*, through the wheels *i* and *j*, or by a pulley, on the other end of the shaft, rotated by a band in communication with any motive-power.

The saws *c c* are so held in their frames that they may be tightened, when necessary, by wires or rods *k*.

The log, when small, will be supported in the V-shaped recesses of both the timbers *m m*, the tooth *n* then being depressed below the log; and when the log is large, it will be carried so far in and on to the recess as that if a log be put in on both sides, the tooth *n* will be between their ends.

The frame in which the saw-frames are moved is hinged, as shown by fig. 1, so that they can be raised to admit of the log or stick being placed in the recess of the timbers *m*.

The frame *x* can be raised by the tooth *n*, connected to the lever *o*, which lever is slotted, *p*, and within which slot the upright bar *q* fits. This allows of the

lever being moved in or out, as may be necessary to operate the tooth *n*.

The fulcrum of the tooth is at *r*, the ends of the fulcrum-pin being sustained in the timbers *m*.

The entire frame, with the two saws and frame, can be moved at the one motion of the lever and tooth, as the upper or outer end of the tooth will bear directly under the central bar *t*.

By having the lever slotted and fitting around the upright bar, the tooth can be moved to a greater degree than if the lever were pivoted to the upright, so that when the log or timber is of moderate size or diameter, the tooth may be turned down, and be entirely out of the way of the log being sawed.

In some instances it may be better to have a slot in the central bar *t*, with an inclined surface, so that the tooth *n*, after raising the frame and lowering it upon the log, may be used for clamping the log, and yet allow the saws to settle downward in sawing through the log.

As will readily appear, by having the frame *x* hinged, the saws can be operated upon logs or sticks of various diameters, and at considerable upward deflection from a horizontal line, and, if eye-hinges be used, also at downward deflections from such line.

The saw-blades *c* may be so attached to the frame as to allow of adjustment toward or from each other, thus providing for sawing a shorter or a longer stick between them. This could be effected by having a slot in the bars *d* of the frame, so that by a screw, or equivalent means, passing through the arms *v* and the side-bars *d'*, a movement of the saw to the right or left could readily be produced.

What we claim as our invention, and desire to secure by Letters Patent, is—

The slotted lever *o* and tooth *n*, constructed, arranged, and operated substantially as recited, in combination with saws made to traverse in a hinged frame, as and for the purposes herein set forth.

This specification signed, this 20th day of June, 1868.

G. M. D. HARRELD.
B. E. HARRELD.

Witnesses:

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