G. W. BOBO.

MACHINES FOR EDGING LUMBER.

No. 184,057. Patented Nov. 7, 1876.

Fig. 1.

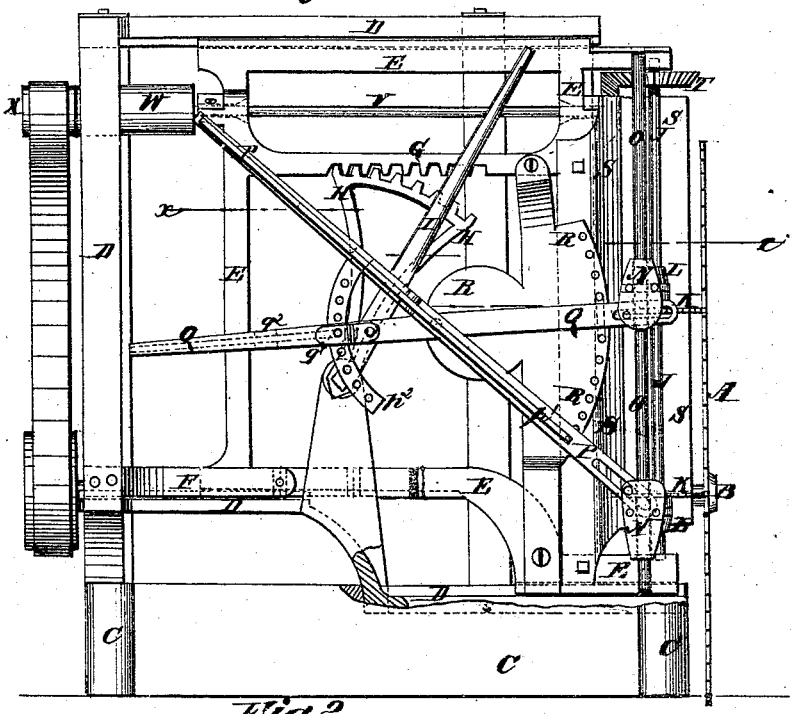
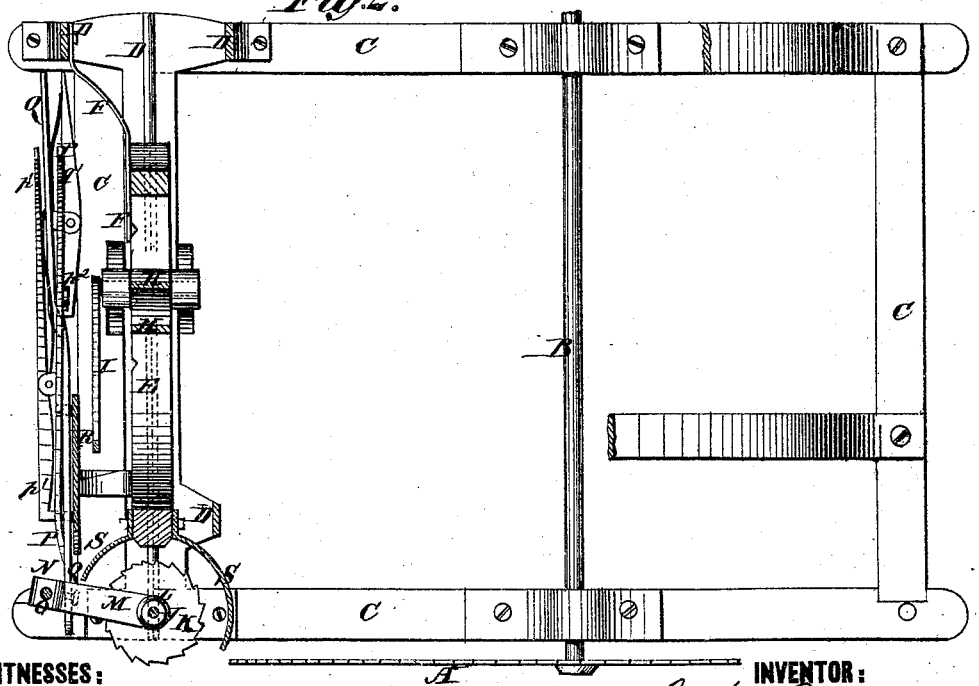


Fig. 2.



WITNESSES:

Francis McArdle.

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UNITED STATES PATENT OFFICE.

GEORGE W. BOBO, OF ROCK MART, GEORGIA.

IMPROVEMENT IN MACHINES FOR EDGING LUMBER.

Specification forming part of Letters Patent No. **184,057**, dated November 7, 1876; application filed June 12, 1876.

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON BOBO, of Rock Mart, in the county of Polk and State of Georgia, have invented a new and useful Improvement in Machines for Edging Lumber, of which the following is a specification:

Figure 1 is a side view of my improved device, shown as attached to a saw-frame. Fig. 2 is a detail horizontal section, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for edging lumber while being sawed, which shall be so constructed that it may be adjusted to edge thicker or thinner or wider or narrower boards, as may be required, and which may be adjusted without stopping the mill.

The invention consists in the combination of the stationary frame, the sliding frame, the driving-shaft provided with a loose pulley and a fixed pulley, the bevel-gear wheels, the saw-shaft, and the saws, with each other and with a saw-frame; in the combination of the arms, the heavy sliding blocks, the guide-rod, and the two levers, with the sliding frame and the saws; in the combination of the toothed rack, the toothed segment, and the lever, with the stationary frame, and with the sliding frame that carries the saws.

A represents the saw, B the saw shaft, and C the saw-frame, about the construction of which parts there is nothing new. D is an upright stationary frame, which is bolted transversely to the saw-frame C just in front of the saw A. E is a frame placed within the frame D, and having its top and bottom bars grooved to receive and slide upon tongues formed upon the top and bottom bars of the frame D. The frame E is held in place when adjusted by a spring-catch, F, attached to the stationary frame D, and which enters notches in a cross-bar of the frame E. Upon a cross-bar of the frame E are formed rack-teeth G, into which mesh the teeth of the segment H. The segment H is pivoted to the frame D, and with it is rigidly connected a lever, I, so that the frame E may be moved out and in by operating the lever I. In bearings in the forward ends of the top and bottom bars of the frame E revolve the ends of the vertical shaft J. The upper bearing of the shaft J should be detachable, so that the saws can be readily detached from said shaft when desired. K K are the edging-saws, which are bolted to hubs L placed upon the shaft J, and connected with it by a tongue and groove, so that the saws K may be carried around by and with the said shaft J, while being free to slide up and down upon it. The hubs L revolve in the ends of the bars M, the other ends of which are attached to blocks N. The blocks N are made sufficiently heavy to hold the saws down by their weight, and have holes formed through them to receive the vertical guide-rod O, the ends of which are attached to the frame E, or to arms attached to said frame. To the blocks N are pivoted the slotted ends of two levers, P Q, which are pivoted by the same bolt to a plate, R, attached to the frame E. In the plate R are formed a number of holes upon the arc of a circle, having the pivot of the levers P Q for its center, to receive the pin of the spring-lever catch p^1 attached to the lever P, to lock it in position when adjusted. To the outer part of the lever P is rigidly attached an arm, p^2, curved upon the arc of a circle having its center in the pivot of said lever. The arm p^2 passes through a keeper, q^1, attached to the lever Q, and has a number of holes formed through it to receive the pin of the spring-lever catch q^2 attached to the said lever Q. By this construction, by releasing the spring-lever catch p^1, the two saws may be raised and lowered upon the shaft J, without changing their relative position. By this construction, by releasing the spring-lever catch q^2, either saw may be moved up and down independent of the other to adjust them at any desired distance apart. S are curved plates attached to the front bar of the frame E to protect the operating mechanism from the sawdust. To the upper end of the vertical saw-shaft J is attached a bevel-gear wheel, T, the teeth of which mesh into the teeth of the bevel-gear wheel U, attached to the forward end of the horizontal shaft V. The shaft V revolves in bearings in the upper part of the frame E, and has a long loose pulley, W, and a short fixed pulley, X, upon its rear end to

receive the belt by which it is driven from the saw-shaft B, or any other convenient power.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the stationary frame D, the sliding frame E, the driving-shaft V provided with a loose pulley, W, and a fixed pulley, X, the bevel-gear wheels U T, the saw-shaft J, the saws K K, and hubs L, with each other and with a saw-frame, C, substantially as herein shown and described.

2. The combination of the bars M, the heavy sliding blocks N, the guide rod O, and the two levers P Q, with the sliding frame E, the saws K K, and hubs L, substantially as herein shown and described.

3. The combination of the toothed rack G, the toothed segment H, and the lever I, with the stationary frame D, and with the sliding frame E that carries the saws, substantially as herein shown and described.

GEORGE W. BOBO.

Witnesses:

NEWTON COCHRAN,

W. N. STRANGE.