

H. E. Bradt,

Saw Edger.

No. 113,487.

Patented Apr. 11, 1871.

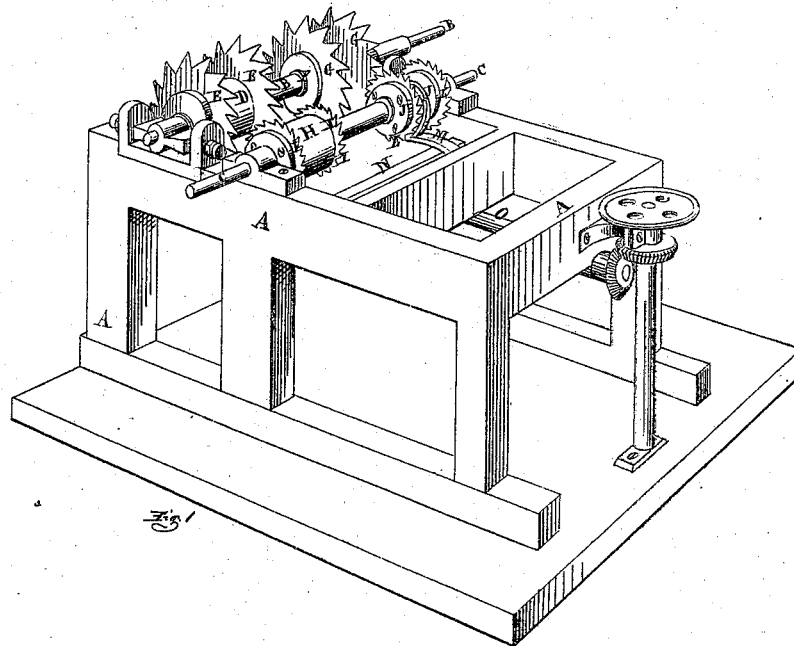


Fig. 1

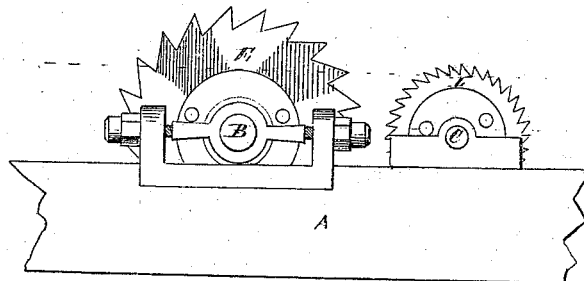


Fig. 2

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HENRY E. BRADT, OF MANISTEE, MICHIGAN.

IMPROVEMENT IN EDGING-MACHINES.

Specification forming part of Letters Patent No. **113,487**, dated April 11, 1871.

To whom it may concern:

Be it known that I, HENRY E. BRADT, of Manistee, in the county of Manistee and State of Michigan, have invented a new and useful Improvement in Feeding Devices for Sawing-Machines; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of an edging-machine having a stationary edging-gang and an adjustable pair of edging-saws, for each of which is supplied my improved feed mechanism; and Fig. 2 is an end elevation of one saw and its feed-roll.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improved feed mechanism for sawing-machines designed for ripping and splitting lumber, by the use of which an arbitrary feed is obtained. The marks or indentations, being in the wake of the saw, are cut out by it, leaving no mark in the lumber which is run through.

The invention consists in the arrangement of a serrated disk or disks in connection with drums or collars sliding on the feed-shaft simultaneously with the saws on the mandrel, as more fully hereinafter described.

In the drawing, A represents the frame of an edging-table, and B a saw-mandrel, journaled in suitable boxes in the top thereof. C is the feed shaft or mandrel, also journaled in said frame in front of and parallel with the saw-mandrel. Both mandrels are rotated in the usual manner and at the proper relative speeds.

D is a drum on the saw-mandrel, to either side of which is secured the saws E by suitable collars, the whole rigidly secured to the mandrel. F is another drum, sliding freely on the saw-mandrel, but is rotated by said mandrel through a feather engaging with and sliding in a keyway cut in said mandrel. At either side of this drum are secured the saws G.

H is a feed-drum on the feed-shaft. To the sides of this drum are secured, by collars or otherwise, the serrated disks I in the wake of

the saws E. The teeth of these disks project a little above the table of the machine, which is not shown.

J is a feed-drum, sliding freely on the feed-mandrel, to which it is feathered like the movable drum on the saw-mandrel. To the sides of the drum J the serrated disks L are secured. Like the other disks, their serrations project above slots in the saw-table, directly in the wake of the saws G.

M is a clutch-yoke, engaging with the saw-drum F and feed-drum J, and is secured to a slide, N, which receives a lateral movement by means of a toothed rack on its under side, with which meshes a pinion on the end of the shaft O or other suitable mechanism.

For general use the saws E are set six inches apart and the saws G four inches apart, although they may be set any desired distance apart; but the above arrangement will be found most suitable, as a board may be edged and a six-inch board cut from one side, the nearest of the saws G being moved up with its drum to edge the other side. In sawing two-inch plank the movable drums can be adjusted to edge the plank and cut one 2×6 and 2×4 pieces, or vice versa.

It will be seen that, in whatever position the movable saws may be placed, their feed-disks will be directly in their wake, so that the indentations in the lumber will be sawed out and the boards discharged without marring.

The feed of the lumber is arbitrary, and the board cannot slip or stick, as where the corrugated rolls are used.

I disclaim the invention of the gang of edging-saws, or of a single or several saws moving on the mandrel laterally, as shown; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of a serrated disk or disks, L, in a drum or collars, J, sliding on the feed-shaft C simultaneously with the saws G on the mandrel B, as and for the purposes set forth.

H. E. BRADT.

Witnesses:

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MYRON H. CHURCH.