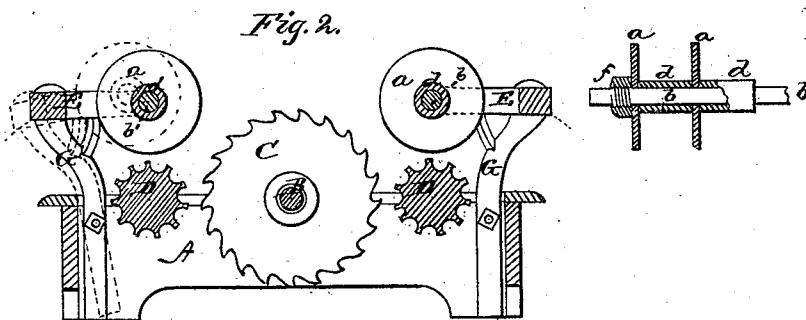
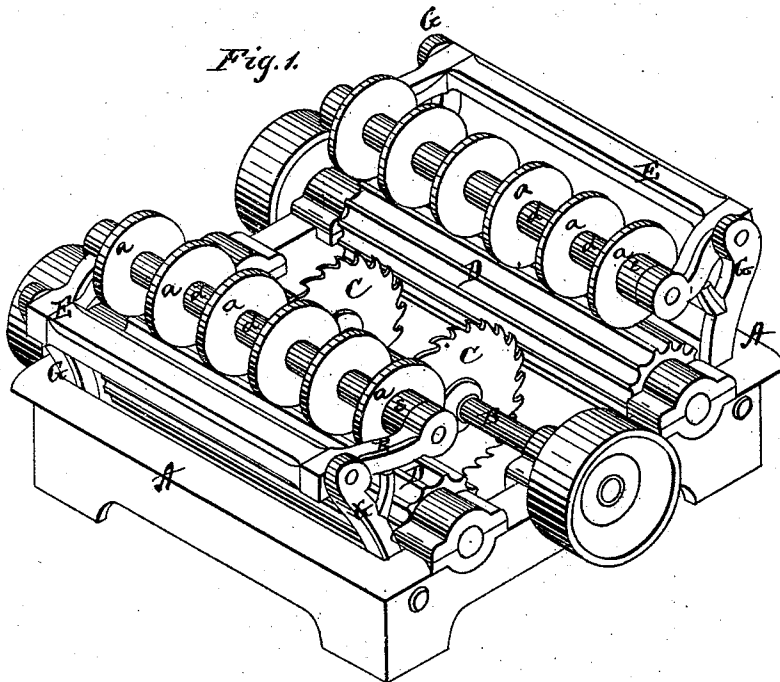


A. T. NICHOLS.

Improvement in Machines for Slitting Boards.

No. 132,854.

Patented Nov. 5, 1872.



Witness:

Henry N. Miller
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Inventor.

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UNITED STATES PATENT OFFICE.

ALBERT T. NICHOLS, OF NORFOLK, VIRGINIA.

IMPROVEMENT IN MACHINES FOR SLITTING BOARDS.

Specification forming part of Letters Patent No. 132,854, dated November 5, 1872.

To all whom it may concern:

Be it known that I, ALBERT T. NICHOLS, of Norfolk, in the county of Norfolk and in the State of Virginia, have invented certain new and useful Improvements in Machines for Slitting or Ripping Boards; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

My invention relates to machines for splitting or ripping boards; and it consists in the manner of building and hanging the top or pressure rolls, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view, and Fig. 2 a vertical section of my machine.

A represents the frame of the machine, in which is situated the shaft B, carrying a series of saws, C C. On each side of the saw-shaft B is a longitudinally grooved or corrugated roller, D which, in combination with the pressure-rollers hereinafter described, feed the lumber to and from the saws. The parts A, B, C, and D may be constructed and arranged in any of the known and usual ways, and I lay no claim to the same. Each of the top or pressure rollers is made of a series of round plates, *a a*, made of steel or iron, and placed on a shaft, *b*, at such distance from each other as is necessary to firmly hold the board down, which passes between the top and bottom rollers. The plates *a a* are made of sufficient size to bring the top of the pressure-rollers above the top of the saw or saws C, so that, if necessary, the boards, after passing once through the rolls, can be sent back on top. The plates are fastened on the shaft *b* by first putting on a collar, *e*, near the end of the shaft, and then putting on a plate up

against it; and then a piece of gas-pipe, *d*, cut such length as to keep the plates at a proper distance from each other, and so on, first a plate, and then a piece of pipe or other suitable device to keep the plates at proper distance from each other, until it is of such length as is needed, and then all held firm by a nut, *f*, screwed on said shaft *b*, leaving sufficient length at each end for a journal. Each pressure-roller thus constructed is hung in a frame, E, and this frame pivoted to two posts or hangers, G G, secured to the inside of the frame A by bolts or other suitable means that will allow of said posts being thrown either forward or backward, as desired. By this means the pressure-roll can be thrown either forward or back at either end, so as to always draw the board to the guide or run it in a straight line.

A roller made and hung in this manner will not clog with sawdust, therefore does away with a cap over the same. The arms of the frame E being rigid always hold the roll level. Although this is particularly designed for slitting boards for flooring, it may be used for edging or slitting boards for all purposes.

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

1. The posts G in combination with the frame A, when said posts are made adjustable to or from the saw-shaft for the purpose of giving an angular adjustment of the pressure-roller, as is herein specified.

2. The combination of the frame A, fluted roller D, adjustable pivoted posts G G, arms E E, shaft *b*, disks *a*, collars *d*, and nut *f*, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of October, 1872.

ALBERT T. NICHOLS.

Witnesses:

EDM. F. BROWN,
C. L. EVERT.