

J. W. BURDWIN & G. S. TILLINGHAST.

Improvement in Bark Breaking and Rossing Machines.

No. 124,788.

Patented March 19, 1872.

Fig. 1.

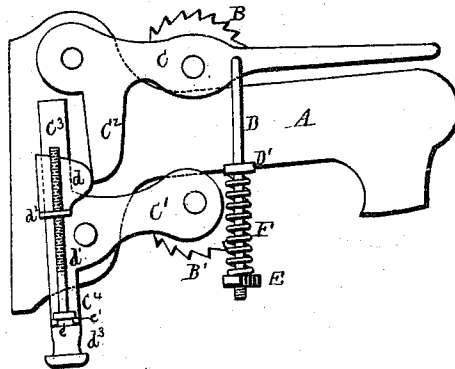
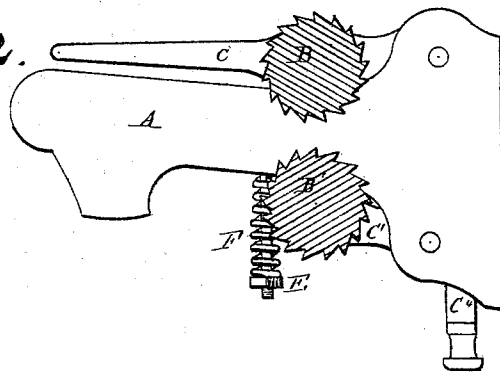


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN W. BURDWIN AND GEORGE S. TILLINGHAST, OF MORRISVILLE, N. Y.

IMPROVEMENT IN BARK-BREAKING AND ROSSING MACHINES.

Specification forming part of Letters Patent No. 124,788, dated March 19, 1872.

To all whom it may concern:

Be it known that we, JOHN W. BURDWIN and GEORGE S. TILLINGHAST, of Morrisville, in the county of Madison and State of New York, have invented a new and valuable Improvement in Bark-Breaking and Rossing Machines; and we do hereby declare the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of our invention. Fig. 2 is a vertical section of the same.

This machine has relation to machines for rossing tanning bark; and consists in the construction and novel arrangement of devices by means of which the feed-rollers are rendered self-adjusting to suit the thickness of bark, in order that the same proportionate amount of ross may be taken from every piece of bark. This invention also consists in such a construction and arrangement of devices as will provide for the adjustment of the feed-rollers, so that the proportion of ross to be taken from the bark may be varied, all as hereinafter described.

Referring to the drawing illustrating this invention, A represents the upper part of one side of a "bark-rossing and breaking machine," for which Letters Patent were granted to us dated December 20, 1870, and to the improvement of which the present invention has reference. B B' represent fluted feed-rollers supported by levers C C', pivoted to each side of the machine by pins *a* and *b*. Attached to the levers C are vertical rods D, which pass through brackets or lugs D' projecting from the sides of the machine. On the lower part of said rods screw-threads are cut and nuts E turned thereon. Between these nuts and the lugs D' spiral springs F are arranged. The tendency of these springs is to draw down the upper feed-roller. Each of the levers B is constructed with an arm, C², and each of the levers B', with two arms, C³ C⁴, having the relative positions clearly shown in Fig. 1. The arm C³ is beveled on its edges, and holds a flanged adjustable plate or fulcrum, marked

d, which is adjusted by means of a screw, *d*¹, working through a lug, *d*², which projects from said plate. *d*³ denotes the head or knob of said screw, constructed with a groove, *e*, which fits a recess cut in a lug, *e*', projecting from the lower end of the arm C⁴.

The distance apart of the feed-rollers is regulated by the thickness of the bark, the arrangement of the arms C C' allowing them to give. The adjustment of the fulcrum-plate *d* regulates the relative distance from the line of the rossing-knife which the rollers shall be moved by, the bark passing between. The bark is fed to the rollers with the "meat" side up. If, then, the fulcrum-plate be moved up, the distance which the upper roller moves away from the line of the rossing-knife will be increased, and proportionately the distance of the lower roller lessened, so that a lesser amount of ross will be removed in proportion to the thickness of the bar. But if the fulcrum-plate be moved down, the lower roller will move the further from the line of the knife, and hence the proportion of ross to the thickness of the bark increased.

It is obvious that the fulcrum-plate *d* may be adjusted so that both rollers will be affected alike.

The lower feed-roller may be dispensed with and an adjustable table substituted, its adjustment being accomplished the same as that of the lower roller.

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

1. In a bark-rossing machine, the adjustable fulcrum *d*, in combination with the levers C C' and fluted rollers B B', substantially as described.

2. The adjustable fulcrum *d*, and adjusting-screw *d*¹, in combination with the lever C¹, having the arms C³ C⁴, and lever C having the arm C², substantially as described.

In testimony that they claim the above they have hereunto subscribed their names in the presence of two witnesses.

JOHN W. BURDWIN.

GEORGE S. TILLINGHAST.

Witnesses:

JOHN R. TIDD,

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