



# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN VENEER-CUTTING MACHINES.

Specification forming part of Letters Patent No. **166,353**, dated August 3, 1875; application filed  
January 21, 1871.

*To all whom it may concern:*

Be it known that I, CURTIS T. FAIRCHILD, of Hartfield, in the county of Chautauqua and State of New York, have invented a new and useful Improvement in Veneer-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to improvements in that class of machines in which the log is mounted on centers, and rotated against a cutter, which is moved toward the log at a regulated speed; and it consists in the employment in such machines of a pressure-roller acting against the log, and so adjusted relatively to the cutter, and to the centers whereon the log turns to prevent logs having "wind shake" or other cracks from slabbing off by the force of the cutter on the edge of the outer parts separated by the cracks when they run so that the knives cut cross them and act thereon, so as to lift or split off such parts.

Figure 1 is a transverse section of my improved machine, and end view of a log mounted in it, and Fig. 2 is a section of Fig. 1 on the line *x x*.

Similar letters of reference indicate corresponding parts.

Many logs have wind-shakes, A B, or other cracks extending around, or partly around, the log, between the sap and the heart, which cracks are eccentric to the axis, so that the knife C cuts across them, as indicated by the line A. As the resisting force of the wood against the knife is very great, it often happens as these machines are now constructed, that the thin slabs D are lifted up by the knife, and split off at or about the point E, and lost.

Now, I propose to employ on such machines a presser-roller, F, arranged for adjustment independently of the knife, but feeding along with it, and to bear upon the log so far above the said knife that before the edge of the part split off comes in contact with the knife, and is subjected to the lifting force thereof, the said presser-roller will force the said piece down upon the main body of the log so hard that it will overcome the force of the knife, and be thereby prevented from being forced off. The roller is not designed to effect the action of the presser-roller G, now commonly used to act directly in front of the edge of the knife to prevent it from splitting or checking the sheet as it is cut off, and it may be used either in connection with such rollers or not. In this example the roller is mounted on supports H, capable of sliding back and forth in the stands I, rising up from the table K, whereon the knife L is mounted, and the said supports are provided with adjusting-screws M, for varying the pressure of the roller F on the log, and adjusting it as the log becomes smaller.

I do not limit myself, however, to any particular way of mounting and adjusting the said roller.

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

The roller F, arranged in a veneer-cutting machine as described, in relation to the knife, its support, and the supporting centers, as and for the purpose specified.

CURTIS T. FAIRCHILD.

Witnesses:

MARION SCOFIELD,  
TRACY SCOFIELD.