

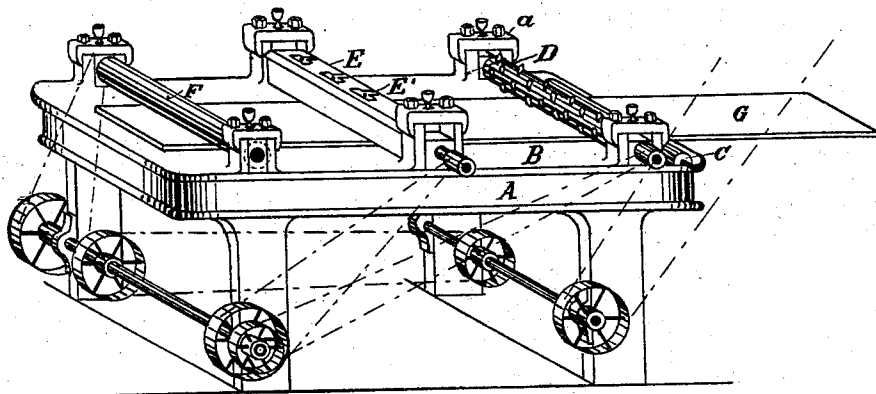
(No Model.)

A. THALHEIMER.  
METHOD OF ORNAMENTING WOOD.

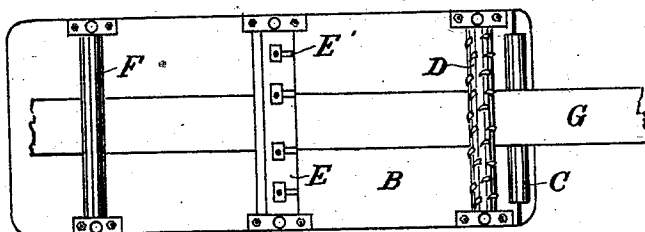
No. 247,966.

Patented Oct. 4, 1881.

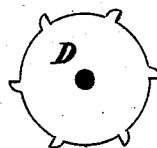
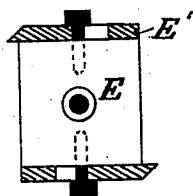
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*

*Thiasner*  
*W. H. O'Kelly.*

*Inventor*

*Albert Thalheimer*  
*per Thomas P. Kinsey*  
*att'y*

# UNITED STATES PATENT OFFICE.

ALBERT THALHEIMER, OF READING, PENNSYLVANIA.

## METHOD OF ORNAMENTING WOOD.

SPECIFICATION forming part of Letters Patent No. 247,966, dated October 4, 1881.

Application filed January 8, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT THALHEIMER, of the city of Reading, county of Berks, State of Pennsylvania, have invented a new and useful Improvement in Wood-Veining Machines, of which the following is a specification.

This machine is more particularly adapted for the production in light-colored and cheaper woods of imitations of dark and high-priced materials.

In the accompanying drawings, in which similar figures denote similar parts, Figure 1 is a perspective view of the machine. Fig. 2 is a plan of the top of the machine; Fig. 3, sectional details.

A represents the frame; B, the bed; C, carrying-rollers; D, the veining-cylinder; E, the polishing shaft or bar, having knives or blunt plates E'; F, a compression feed-drawing roll; G, the board undergoing transformation.

In constructing the veining-roller D one of two plans may be adopted: First, the roller is brought to a uniform size, after which a series of transverse cuts are made to the proper depth for the purpose desired at regular or irregular distances apart. Then, treating the roller as a spindle to be threaded, a series of spirals or screw-threads are traced off of a coarse or fine pitch upon its face, the number of threads cut per inch determining the number of teeth upon the periphery of the roll; or the roll may be built up of a series of alternate washers strung upon the shaft and secured thereon by lock-nuts at one end and abutting against a collar at the other end, each alternate washer being as much larger in diameter than the intervening one as will allow for the depth to which the wood is to be serrated. These larger washers may be stamped out with the cutting-teeth upon their peripheries, or after being clamped together, as described, may have their cutting-teeth formed in the lathe, as before mentioned. I, however, give preference to the first plan, where the cylinder is not of an inconvenient diameter.

The roll or veining-cylinder D is driven in the direction of the entering board G, and serves a double purpose, both veining and feeding the board through the machine. The knife-bar shaft E runs in the same direction as the cylinder D, and has secured to it in the usual

manner two or more blades, E', in this case blank or obtuse edged, and so arranged with reference to the board under treatment as to slightly compress the same by a rubbing of the obtuse-edged knife-plate E' over the surface, giving it a smooth and finished appearance, heretofore unattainable without the use of the sandpapering-machine. The roller F at the rear of the machine assists in passing the board through the machine and serves to steady it, as is usual on all planers.

The lumber designed to be veined is all prepared in advance by dressing to size and a coloring of the desired tint. The color is applied with a sponge and can be done very rapidly and uniformly, and presents a more natural imitation than where the color is applied by rolls or block-printing.

I am aware that it is not new to imitate by machinery the appearance of costly woods upon a cheaper material by imprinting and indenting. (See Patent No. 204,078, May 21, 1878, and Reissue No. 8,507, November 26, 1878, granted to George Pelstring, in which is shown an impression-cylinder, upon which are mounted blocks so constructed and arranged, in combination with inking or paint-color troughs and rolls as to receive and transfer to the board the color together with the design to be compressed or indented therein.)

In my improvement the lumber is dressed and colored previous to its introduction upon the machine, and the indentations are produced by the action of the serrated teeth of the cylinder D, removing from the same a certain portion of its material, any roughness occasioned thereby being obliterated by the action of the polishing and condensing knives E'.

The improvement is applicable to all power-planers, the veining-cylinder D taking the place of the front upper feed-roll, and the motion of the cutter-bar being reversed, brings the back beveled edge of the knife in contact with the lumber and becomes a polisher. The reversal of movement may be executed by the crossing of the belt driving the cutter-bar, if the direct motion were derived from an open belt, or vice versa if previously driven by a crossed belt. In this way, when desired, the machine can be used first as a planer to reduce the material to the proper thickness. Then reversing the motion, as above described, the

veining-cylinder D operating on the rough lumber as a feed-roller and on the prepared as both a feed and veining roll, the imitation-lumber is produced upon the same machine.

5 The journals of the several shafts are supported in boxes adapted to be raised or lowered, as is usual in wood-working machines.

I do not broadly lay claim to a planing-machine for the purpose of producing a veined  
10 surface on previously dressed and colored lumber or boards; but it being most readily adapted for the reception of the veining-roll, and by the simple reversal of the motion of the cutter-bar meeting all the requirements demanded  
15 by the invention, I have suggested that machine as making the simplest and most inex-

pensive to which my improvement could be applied.

My claim is as follows, to wit:

The method herein described of ornament- 20  
ing wood, which consists in passing smooth and previously-colored boards through a planer such as described, whereby the surface of the lumber is routed or torn by the toothed feed-roll D, and the surface is then planished by 25  
the planing-knives E' revolving in the reverse direction, as set forth, and for the purpose substantially as described.

ALBERT THALHEIMER.

Witnesses:

WILLIAM L. GRAUL,  
JOHN RESSLER.