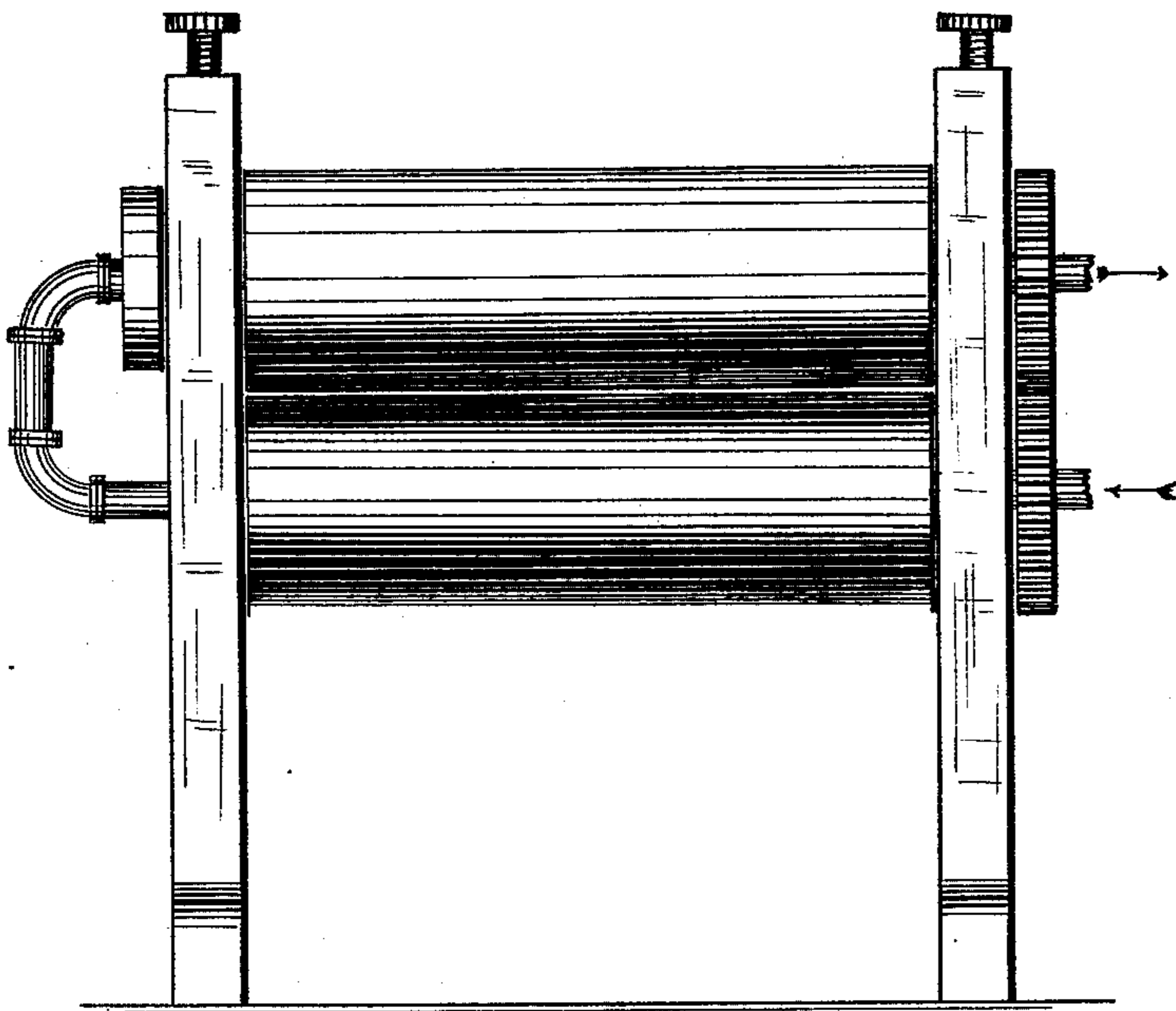


A. B. RICE.
Wood-Veneer.

No. 215,162.

Patented May 6, 1879.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN WOOD VENEERS.

Specification forming part of Letters Patent No. **215,162**, dated May 6, 1879; application filed November 19, 1878.

To all whom it may concern:

Be it known that I, ADOLPH B. RICE, of the city of Brooklyn, Kings county, State of New York, have invented certain new and useful Improvements in Wood Veneers; and I hereby declare my said invention to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which is illustrated the apparatus I make use of in producing the novel and important results hereinafter set forth.

In Letters Patent of the United States granted to me June 18, 1878, numbered 205,138, is described an embroidery-pattern, consisting, in the terms of the claim, of "a sheet of wood veneering perforated for ornamentation, the said perforations being arranged and adapted for filling in with needle-work." These Letters Patent are here referred to in order that a clear apprehension be had of the properties and qualities desirable in a sheet of veneer to be used as an embroidery-pattern, which properties and qualities are conferred upon subjecting the veneer to the processes forming a part of my present invention.

I have discovered that a sheet of natural veneer, whether cut parallel to the axis of the log, or inclined thereto, or around the log, and having the stiffness, harshness, and brittleness, and unfinished surface usually seen in veneers, is rendered by a simple process of calendering tough, strong, pliable, and smooth, eminently adapting it for the manufacture of the embroidery-pattern referred to. The process of punching the holes is greatly facilitated, and the danger of cracking or breaking the pattern in that process, as well as in the subsequent operation of filling in with needle-work, is wholly obviated.

Not only are the properties named desirable in the pattern-card veneer, but also, and, if possible, to a greater degree, are they valuable in veneers to be used in the ordinary processes of cabinet-making, as, by reason of the toughness and pliability of the calendered veneer, it is more readily applied to sharply-curved surfaces, and its density greatly conduces to

economy of the ordinary costly shellac or copal polishes and sandpapering.

In practice I make use of a calendering-machine such as is commonly used in paper-making, consisting of a pair of highly-polished hollow metal cylinders arranged to revolve in suitable adjustable bearings, and provided with means for heating the cylinders. Preferably steam at a tension of seven or eight atmospheres, and taken directly from the boilers of the engine used to drive the cylinders, is led through their bearings and serves to keep them at a proper temperature. A veneer cut in the usual manner is then led between the rolls or cylinders, and may be passed between them as often as is desired.

I have succeeded in making from common veneer, say, gum-wood, an imitation of black walnut, which is practically undistinguishable from it, by the following process: The gum-wood veneer is first coated on one or both sides with a proper staining material made from umber or similar pigment, and a second coating of wax, linseed-oil, paraffine, or stearine, in solution, is also applied to the colored surface. The veneer is then passed between the rolls, which produce the effects before named upon the grain of the wood, besides thoroughly drying it, fusing the oil, wax, or stearine coating and forcing it into the pores of the wood.

For veneer to be used in cabinet-making, of course this coating need only be applied to one side of the wood, as it would tend to prevent the glue used subsequently from taking a firm hold upon the veneer.

Obviously, imitations of various woods, such as satin-wood, bird's-eye maple, French walnut, &c., may be made by suitably printing the grain and color upon a sheet of common veneer. Gum wood is preferred for this purpose, as its natural grain is not prominent, and will not mar nor conflict with the effects produced by printing the imitation grain. This latter process is conveniently carried out by printing from an electrotypes or stereotypetype impression of the handsomer and costlier wood; or a block of the wood itself, or a sheet

of its veneer attached to a block, may be used as a type.

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

1. Calendered veneering possessing the properties hereinbefore described—to wit, toughness, density, and pliability—in degree distinguishing it from natural veneer, substantially as set forth.

2. Compressed or compacted veneering coated on one or both sides with a pigment or wax, or its specified equivalent, or both, whereby distinguishing properties are conferred upon it, as and for the purposes set forth.

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