

## CUTTING VENEER.

EXPERIENCE proves that, while the finer and thinner veneers are sliced tangentially from the side of the logs, there are woods that cannot be cut this way, no amount of boiling or steaming rendering it possible to cut them without breaking down the tissues to such an extent as to destroy their surfaces in polishing, while others become discolored from steaming or boiling and, being too hard to cut otherwise, have to be sawed. The fine-toothed, thin-gauge circular with flanged centre is the favorite for cutting all ordinary veneers thicker than thirty to the inch; twenty to the inch is the thickness most commonly used for cabinet work and finishing, but much thinner is used in the case of rare and costly woods, or rare abnormal or accidental figures, as in case of burls. Some woods have to be cut much thicker, being unable to bear handling when too thin. Genuine ebony, the only fine, really jet-black wood known and large enough to be of any use, will not stand sawing much below one-fourth of an inch in thickness, owing to its extreme brittleness or want of cohesion, but there are other woods that may be cut as thin as writing paper and still be handled in large sheets. woods will lose their fine color on exposure to the atmosphere, especially a smoky one; these are cut only when immediately wanted, and they are kept covered until the finishers can put on a protective coat of some preparation.

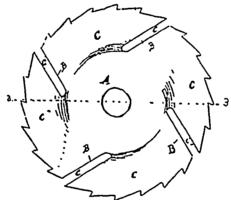
## CEMENT SPLICES IN BELTS.

The first requisite towards making a good cement splice in a leather belt is a cement which will stick. A good substitute for belt-makers' cement consists of two parts common and one part of isinglass or fish glue. Most well-known belt makers manufacture a form of cement, and each one claims that his cement is the best in the world, etc. Most of these cements are good, and there is very little, if any, choice between them. Most of them may be purchased in quantities to suit, at a price ranging from 60 to 70 cents per pound, and a pound of this cement will go a long way in making up the splices. Scarf the belt to a length equal to the width; in double belts make a long and a short lap, both edges being placed so as to follow the run of the belt. In other words, the fag end of the lap should run with the pulleys, not against them. When the belt is placed wrong end to and the thin edge of the lap goes first to the pulley, the splice is sure to suffer, and frequently will be torn in two by the rolling up of the thin edge of the scarf. Let the short lap be one-quarter of the long lap one whole width in length. These laps had better be planed down with an ordinary carpenter's plane. To do this, the belt may be pegged with ordinary shoe pegs upon a board so

that the end of the belt coincides with the extreme edge or side of the board. The vigorous application of the floor plane soon reduces the end of the belt, and if a good deal of care is taken to keep the scarf of even lengths a good job may be done in a very short time. The scarf being perfected, place a board over the belt, and clamp rods so that the belt may lie upon it. Then apply the cement according to directions, and when the ends of the belt are placed together hammer them lightly, but thoroughly, and if the belt must be had for immediate use drive pegs enough through the leather to hold the splice while the cement is setting. If possible leave the clamps on the belt for one hour or more before starting up. Such a splice should run a year at least, and if there is no stretch to the belt, and the power expected of it is not too great, it may be two or even three years before further attention is required of that belt.

## PATENTS FOR WOOD-WORKING MACHINERY.

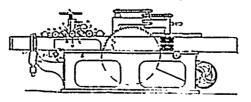
THE following patents of interest to woodworkers have been granted for Canada:



GROOVING SAW.

Patentee: Charles Baar, Grand Rapids, Mich., granted 10th June, 1896; 6 years.

Claim.—A circular grooving saw, having a flat central portion and a series of deep openings extending from its periphery to said central portion, thereby forming toothed segments, detached from each other at their adjacent ends, said segments being turned or twisted out of the plane of the central portion of the saw, and formed with a series of cutting teeth, and turned or twisted in opposite directions, substantially as described.

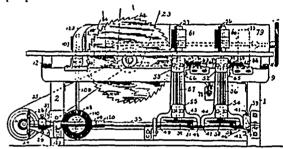


WOOD-WORKING MACHINE.

Patentee: William Tickle, Liverpool, Eng., granted 7th May, 1896; 6 years.

Claim. In a saw frame or bench providing in

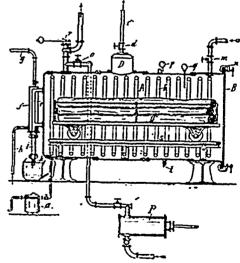
combination therewith a series of cutters at the back of the saw or of the saw teeth, whereby boards are not merely sawn from the timber, but can be either on top or bottom or both tongued, grooved, moulded, planed, rabbeted, or the burred or frayed edges smoothed off in one operation, substantially as described. The combination with a saw frame, a cutter arranged at one side or both sides of the board or plank being cut, whereby at the same time that the boards are being sawn, they can be planed or moulded as desired. In combination with a saw bench, one or more cutters C, C', and a side cutter X, substantially as described. In combination with a saw bench, the cutters C and weighted rolls U, substantially as and for the purpose described.



SLAB-SAWING MACHINE.

Patentee: A. W. Goodell, Philadelphia, Pa., granted 22nd June, 1896; 6 years.

Claim. In a slab-sawing machine, a saw attached thereto, a movable fence thereon, means to move the fence simultaneously at each end from a single operative point, upright feed-rolls therefor seated upon a rectangular shaft, the rolls being in longitudinal and removable sections, and carried in a yoke upon a shaft normally upright but having means for side adjustment. In a saw, a table, a frame, a movable fence and a driven delivery-roll thereto attached, feed shafts, feed-roll shafts swingingly attached thereto, means to press the feed-rolls automatically and by hand against the material being operated upon, and stops secured to the framing to limit the movement of the equalizing lever, substantially as specified.



PROCESS OF PRESERVING TIMBER.

Patentee: Frederick M. Grumbacher, Berlin, Germany, granted 23rd June, 1896; 6 years.

Claim. – The hereinbefore described process for preserving and hardening wood, consisting in first subjecting the wood to a preliminary drying at a comparatively low temperature and then to complete preserving and hardening under pressure at a higher temperature, substantially as hereinbefore described.