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VENEER SAWING MACHINE.

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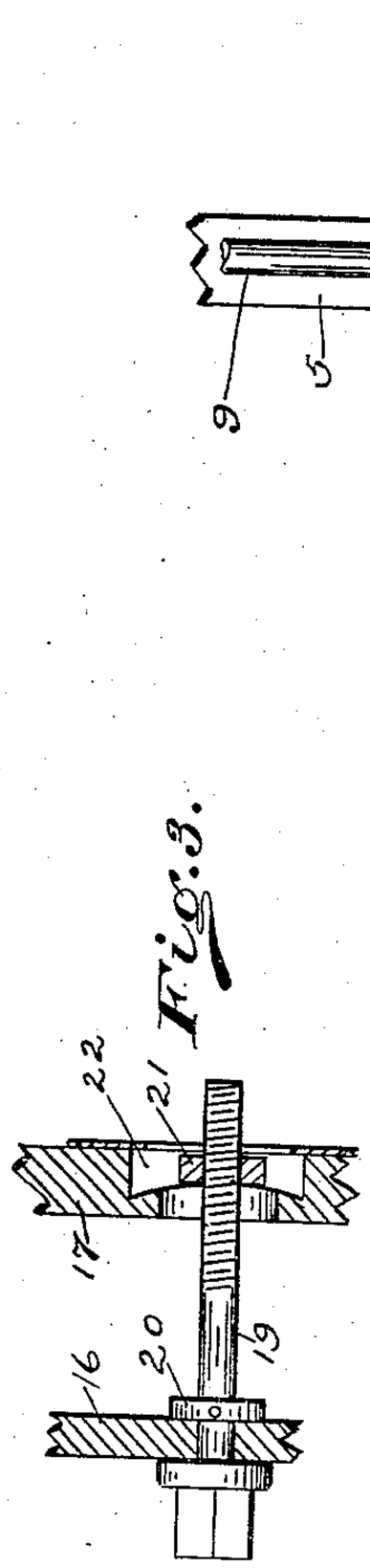

Fig. 3.

Fig. 1.

Fig. 2.

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VENEER-SAWING MACHINE.

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To all whom it may concern:

Be it known that I, JOHN FARROW, a citizen of the United States, residing in Covington, county of Kenton, and State of Kentucky, have invented certain new and useful Improvements in Veneer-Sawing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

In the construction of apparatus for sawing veneers, it has heretofore been practicable to saw only one log at a time, and in addition, when the log has been cut down to about two inches in thickness, no further veneers can usually be cut therefrom. In the ordinary constructions, the log is held in the carriage by dogs, which grasp and secure the log as near the edge as possible so as not to interfere with the saw, but when the timber is cut down to about two inches in thickness, the lateral vibration of the comparatively thin plank and the pressure of the retaining dogs at top and bottom, causes the timber to buckle and bulge out, so that no further veneers can be cut.

My improvements relate to devices for preventing this vibration and buckling of the timber, and by the use of which not only can single logs be cut down within a very small portion of an inch of the dogs, but in which two logs can be sawed into veneers at the same time, and thus in both respects the capacity of the machine can be very largely increased.

In the drawings Figure 1 is a plan view of my improved clamp, showing such portion of the carriage for the timbers as will illustrate the operation of the device. Fig. 2 is a side elevation of same. Fig. 3 is a detail cross section of the clamp taken on the line *x*—*x* of Fig. 2.

1 represents the framework of the carriage for supporting the timbers to be fed to the veneer saw 2, which projects through the floor of the mill in the usual way. This carriage frame is provided with flanged wheels 3—3 shown in dotted lines in Fig. 2, which wheels ride on the track 4, so that the framework can be advanced to the saw to cut the veneers.

5—5 represents the upper portion of the carriage, which is mounted on the rails or guides 6, of the lower portion of the framework, so that the upper portion can be shifted laterally the required distance to cut the veneers successively from the timbers.

7—7 are pulleys mounted on the upper portion of the framework connected by the cord 8, and 9—9 are shafts on these pulleys, which are so connected with a hand wheel, not shown, that the upper portion of the carriage can be advanced laterally to present the timbers for the cutting of the veneer strips.

10, 11 represent the timbers from which the veneers are cut, which are securely clamped to the upper portion of the carriage by the dogs 12, operated by the screws 13.

All the above briefly described construction, with the exception of the two logs 10 and 11, is old and well-known, and we have, therefore, not considered it necessary to illustrate or describe at any greater length. With this old construction, in the first place, only one log can be sawed at a time, because if two logs were secured in the carriage one above the other as soon as they were partially cut away, the pressure of the dog clamps would cause the timbers to bend or turn outward on the line of support between them. In the second place even with one log, when the veneering has been cut away to leave a plank of about two inches in thickness, with a log of ordinary diameter, the width becomes too great to withstand the pressure, so that the timber bends lengthwise and lateral vibration also prevents any further cutting of the plank. All these objections are obviated with the use of my improvements.

14 is a post rigidly secured in the floor of the mill in proper position with reference to the saw 2, which it will be understood also is fixed in position. Bolted, or otherwise rigidly secured, to this post 14 is the frame 15—16.

17 is a substantial pressure board, or plate, preferably of metal, which is pivoted at 18 to the frame 15.

19 is a collar screw provided with the collar 20 mounted in the outer end of the frame-plate 16, which collar screw engages a nut 21 mounted in a slot 22 in the outer end of the pressure plate 17, so that by turning the screw 19 with a wrench, the inner end of the pressure plate 17 may be brought to bear with any desired pressure upon the faces of the timbers 10 and 11 held in the timber carriage. As shown in the drawings, this

clamping pressure is brought to bear upon the timbers a short distance in advance of the cut of the saw, and as the timber carriage is advanced to cut the veneer, the timber slide under the pressure plate maintaining a constant and even pressure thereon to prevent any bulging or lateral vibration. With this pressure board thus located not only can two logs be cut simultaneously, but in as much as there is a front support for the material we can continue to cut off veneers until within a sixteenth of an inch of the dogs, which hold the logs in the carriage. As sufficient grasp can be obtained for the dogs within an inch of the edge, where the logs are supported in front by the pressure board, the logs can be cut to leave a strip only a little over an inch in thickness.

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

1. In a veneer sawing machine, the combination with a movable carriage supporting the timbers to be cut, of a support, and a pressure plate comparatively thin in proportion to its width and length, with pivotal connection therefor to said support on an axis parallel to its width, and arranged to contact with the face of the timbers to be cut, substantially as described.

2. In a veneer sawing machine, the combination with a movable carriage supporting the timbers to be cut, of a support, and a pressure plate comparatively thin in proportion to its width and length, with pivotal connection therefor to said support on an axis parallel to its width, and arranged to contact with the face of the timbers to be cut, with means for adjusting the pressure of said plate, substantially as described.

3. In a veneer sawing machine, the combination with the movable carriage supporting the timbers to be cut, of a fixed support, a pressure plate pivoted to said support and arranged to contact with the face of the timbers to be cut, a screw mounted on said support with slot in the pressure plate, and a nut in said slot engaged by said screw whereby the pressure of said plate may be regulated, substantially as described.

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