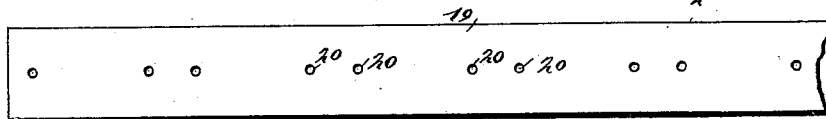
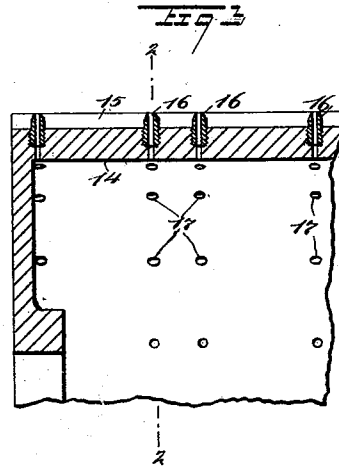
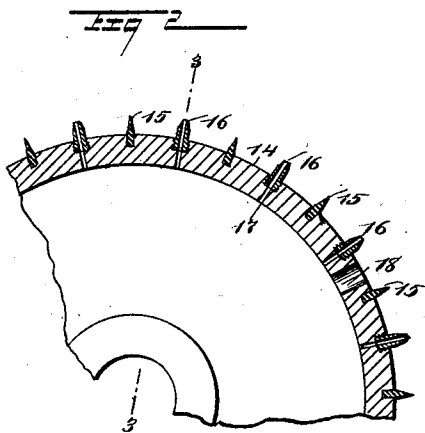
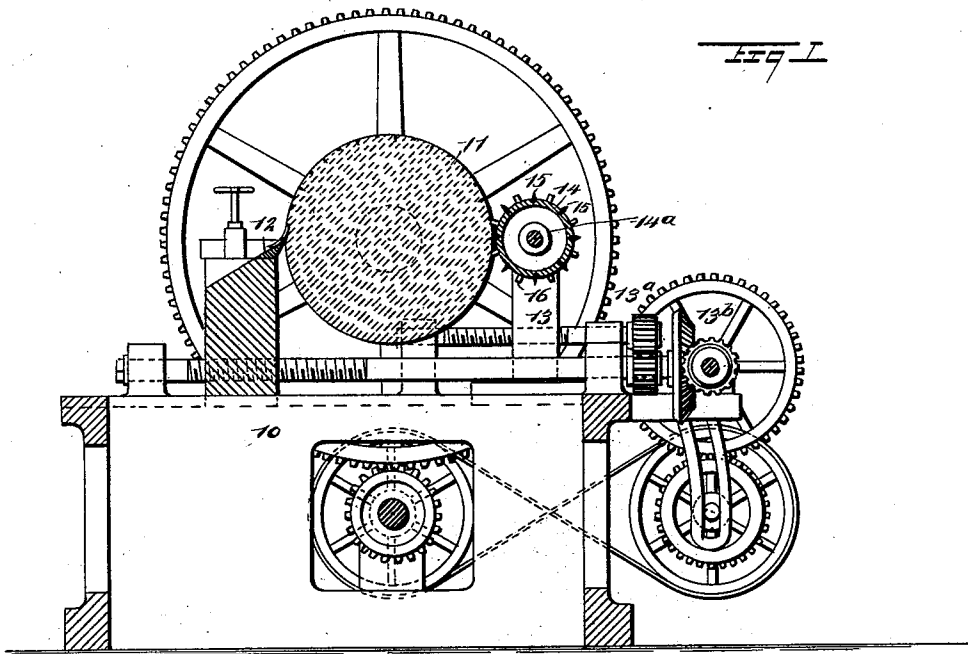


(No Model.)

A. H. ADAMS.
HOOP CUTTING MACHINE.

No. 508,264.

Patented Nov. 7, 1893.



WITNESSES:

H. Walker
C. Sedgwick

Fig. 4

INVENTOR

A. H. Adams
BY Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALBAN H. ADAMS, OF FORT MEADE, FLORIDA.

HOOP-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 508,264, dated November 7, 1893.

Application filed March 1, 1893. Serial No. 464,183. (No model.)

To all whom it may concern:

Be it known that I, ALBAN H. ADAMS, of Fort Meade, in the county of Polk and State of Florida, have invented a new and Improved Hoop-Cutting Machine, of which the following is a full, clear, and exact description.

The invention relates to improvements in machines for cutting hoops from veneers.

The object of the invention is to produce an attachment in the form of a roller cutter which may be applied to any ordinary rotary veneer cutting machine, and which is adapted to score the log or make longitudinal incisions therein, and at the same time, make perforations between the incisions so that when the veneer is turned from the log it will fall apart at points coincident with the incisions, thus forming a plurality of hoops, the grain of which runs lengthwise and which are already punctured so as to receive the nails by which they are attached to a box or other article.

The hoops made on the machine are especially adapted for use on boxes such as orange boxes, but the hoops may be used in any usual way.

To these ends the invention consists in certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a cross section of a common form of rotary veneer cutting machine and of the improved cutter attachment. Fig. 2 is a broken detail cross section on the line 2—2 in Fig. 3, and shows the construction of the improved rotary cutter. Fig. 3 is a broken longitudinal section of the same on the line 3—3 in Fig. 2; and Fig. 4 is a broken detail view of a hoop.

The veneer machine 10 is of the ordinary rotary type, and will not be described in detail, as the attachments may be applied to any machine of this class. The machine is adapted to carry a log 11 in the usual way, and it has the customary knife 12 which extends parallel with the log and is fed inward so as to turn the log into a continuous sheet or

strip of veneer. On the back side of the log is carried a revoluble roller 14 which is hollow and is journaled on a shaft 14^a carried in supports 13, these being fed inward toward the log by the ordinary screw or gear mechanism 13^a. The only novelty in the entire machine which I claim as my invention is in the construction of the cutting roller 14, and the parts carried by the roller, and it will be understood that this cutter or cutting roller may be applied to any rotary veneer machine.

The roller 14 is hollow and upon its circumference are longitudinally extending parallel knives 15 which are adapted to cut into the log 11 and the distance between which corresponds to the width of the hoop. Between each pair of knives 15 are dies or punches 16, which are arranged in longitudinal rows, and the openings in the dies register with the openings 17 leading through the shell of the roller. When the cutter revolves, the dies punch holes in the log, and the material removed by the punches or dies passes through into the log, and holes are made between the incisions caused by the knives 15, so that when the veneer is turned from the log by the knife 12, the hoops will be punctured ready to receive the nails by which they are fastened to a box or other article.

It will be understood that the dies may be made to extend entirely through the shell without changing the principle of the cutter, but it is better to have them extend but partially through the shell, as this arrangement affords an abutment for their inner ends and makes them much stronger. The dies or punches are screwed into the shell of the roller so that they may be easily removed and new ones inserted when necessary.

When the machine is set in motion and the log 11 is turned, the knives 15 make parallel incisions in the log, the dies punch holes, as described, and a continuous quantity of hoops is turned off by the knife 12. Each hoop 19 is provided with perforations 20 which are made by the dies or punches 16. The material which passes through the dies to the interior of the roller may be cleaned out or will drop out through slots 18 in the roller.

I am aware that roller cutters have been

used to score a log in the manner indicated, and I do not claim such a cutter broadly as my invention.

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

1. The combination with the log turning mechanism and the cutter parallel with the log, of a rotary hollow drum parallel with the
10 cutter and having parallel longitudinal knives to incise the log and rows of apertures between the several knives, punches mounted in said apertures to punch a longitudinal row
of holes in the wood between the incisions

made by the knives and means for automati- 15
cally feeding the cutter and drum toward the log, substantially as set forth.

2. The hollow drum provided with longitudinal extending parallel knives, a longitudinal row of apertures between each pair of
20 knives and tubular punches mounted in the said apertures for punching a row of holes intermediate of the incisions made by the knives, substantially as set forth.

ALBAN H. ADAMS.

Witnesses:

WM. LEBO,
CHAS. E. ADAMS.