(No Model.)

H. ARND & F. KUKKUCK.

MACHINE FOR CUTTING SHEETS OF VENEER.

No. 268,767. Patented Dec. 5, 1882.

Fig 1

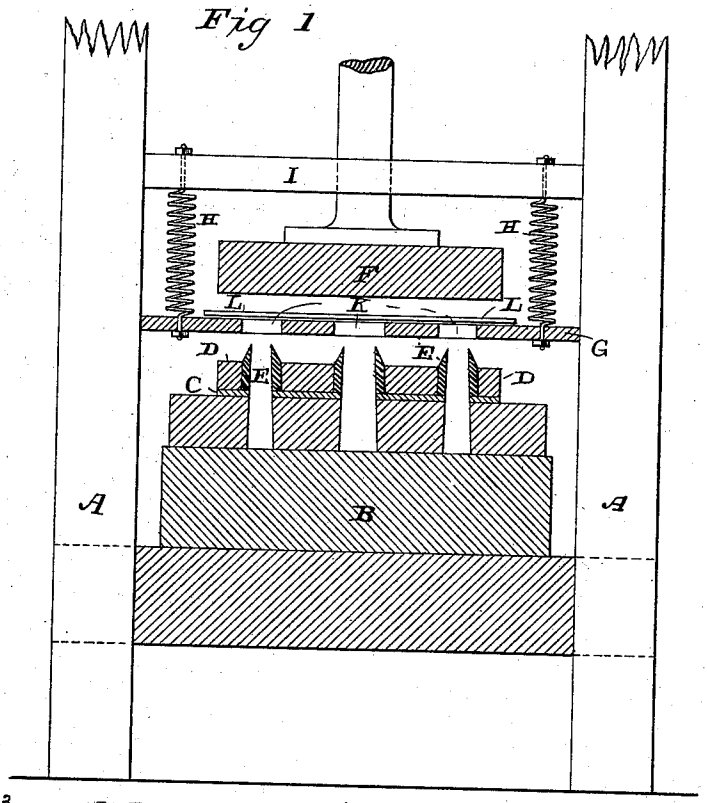


Fig. 3.

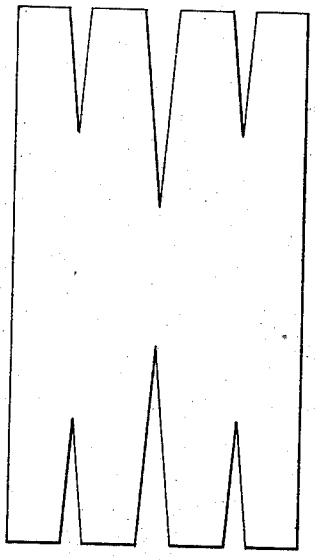


Fig. 2.

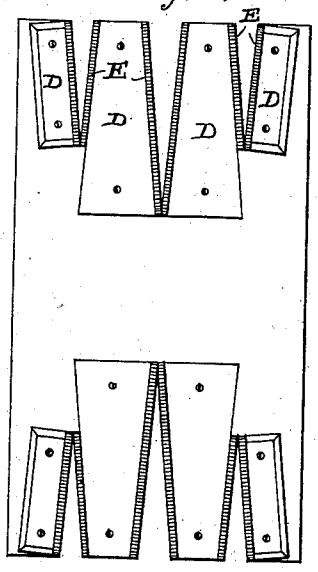
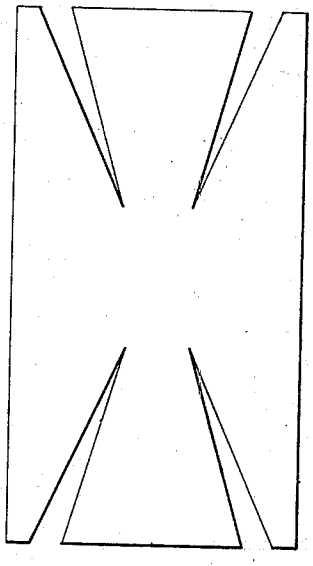


Fig. 4.



WITNESSES

Wm a Skinkle

Jos. S. Palmer

INVENTORS

Henry Arnd

Frederick Kukkuck

By their Attorneys

Baldwin, Hopkins, & Peyton.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY ARND AND FREDERICK KUKKUCK, OF ST. LOUIS, MISSOURI.

MACHINE FOR CUTTING SHEETS OF VENEER.

SPECIFICATION forming part of Letters Patent No. 268,767, dated December 5, 1882.

Application filed August 21, 1882. (No model.)

To all whom it may concern:

Be it known that we, HENRY ARND and FREDERICK KUKKUCK, of the city of St. Louis, and State of Missouri, have invented a new and useful Machine for Cutting and Shaping Sheets of Veneer or Thin Wood, of which the following is a specification, reference being had to the accompanying drawings.

The object of our invention is to cut and form blanks of veneer or thin sheets of wood for use in the manufacture of trunk-tops and the like curved forms.

In the manufacture of what are known as "barrel-stave" tops, we have devised an improvement in the art of making the same out of veneers or thin sheets of wood, by which we employ blanks gored longitudinally, or in the direction of the grains of the wood, for which we have been granted United States Letters Patent, No. 262,956. It is to form these gored blanks that our present machine is devised.

In the accompanying drawings, illustrating our invention, Figure 1 is a vertical section, partly in elevation. Fig. 2 is a plan view of the cutters and their supporting parts detached from the machine, and Figs. 3 and 4 show veneer blanks cut with gores to show the work of our invention.

A indicates a suitable frame for supporting the heavy bed-piece B, on which rests the apertured plate C, carrying on each side of its apertures knife-supports D and knives E. These knives are secured in any suitable way to their supports, and the supports are secured adjustably by means of screws or otherwise to the plate C. The knives of each set of cutters and their supports are set upon the plate at an angle to each other, being in contact at the inner ends, and open or apart more or less at the outer ends, so as to be adapted to cut out gored pieces from veneers or thin sheets of wood. Over these knives, and working in suitable ways or bearings in the frame of the machine, is a vertically-reciprocating plunger, F, for the purpose of forcing the thin sheets of wood to be gored down upon the goring-knives.

G indicates a plate suspended by coiled springs H H from the beam I, and working in suitable vertical ways (not illustrated) in the side posts of the frame. This plate is provided with gore-shaped apertures K, suitable to expose the part of the veneer or thin sheet of wood L, which is to be forced down upon the cutters. The coiled springs serve to automatically raise the plate G, and with it the gored blank, as soon as the plunger is elevated, and to clear the blank from the cutters. The plunger may be worked by power in the usual manner, the sheets of veneer or thin wood being adjusted into proper position by hand or side guide-strips; or pegs may be provided on the plate G. The lower side of the plunger-head is a plain surface, preferably provided with recesses, (not illustrated,) into which edge-wood blocks are driven in such position as to be flush with the head of the plunger and preserve its plain surface and cover the gore-spaces opposite the knives. The result is that the plain surface of the plunger-head when it bears down upon the thin sheets of wood upon the plate G smooths the sheets thoroughly before they are forced down upon the cutters, the springs H H being stiff enough to give ample resistance for this purpose. The edge-wood blocks, on account of their grains running vertically, enable the cutting to be done more perfectly, as is well understood, and as they wear out they can be readily replaced.

The knives are preferably set with their backs inclined apart, so that the gore-shaped apertures between them will be smallest at the cutting-edges and grow larger toward the backs of the knives, thus freeing the waste gore-pieces that are cut out, and permitting them to drop out of the way.

One, two, or more sets of cutters may be employed, according to the size or width of the blank that it is desired to form.

The length and width of the gores may be varied—the length by adjusting the plates to be cut with reference to the knives, and the width by adjusting the angle at which the knives incline toward or from each other.

The direction of the gores may be varied with reference to the grains of the blank to be cut at will, for the purpose of preventing the joints in one blank from coming directly over the joints in another blank when the blanks are placed and joined together.

For convenience, in connection with each machine there should be two or more plates

C provided with cutters having different directions of cut with reference to the blanks, for the sake of breaking joints, as described.

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

1. In a veneer-blank-cutting machine, the combination of the plate C, having gore-shaped apertures, and the gore-cutting knives and their adjustable supports, arranged substantially as described.

2. In a veneer-blank-cutting machine, the plunger, the plate G, having gore-shaped apertures, and its supporting-springs, in combination with suitable frame-work and a cutting device, substantially as described.

3. In a veneer-blank-cutting machine, the combination of the plunger, the plate G, having gore-shaped apertures, and its springs, with the gored-apertured plate C, the cutters, and their adjustable supports, substantially as described.

In testimony whereof we have hereunto subscribed our names this 17th day of August, A. D. 1882.

HENRY ARND.
FREDERICK KUKKUCK.

Witnesses:
WM. P. ARND,
R. E. SCHRICK.