J. A. WATERMAN.

VENEER CUTTING-MACHINE FOR BARREL-MAKING.

No. 182,499. Patented Sept. 19, 1876.

Fig. 1

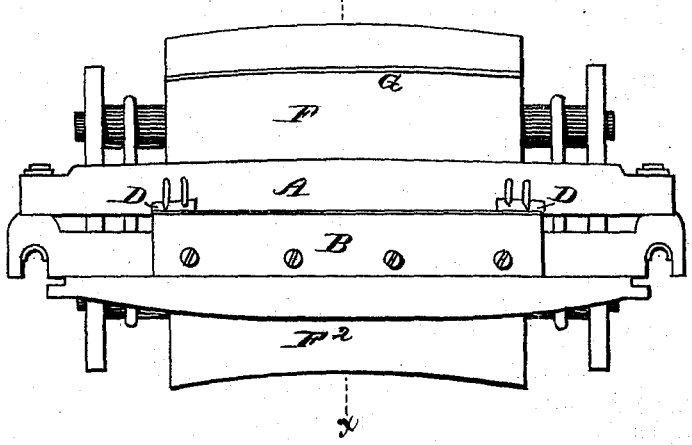


Fig. 2.

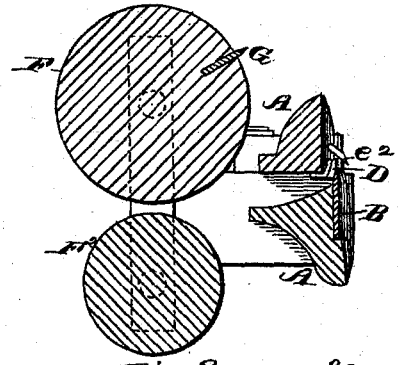
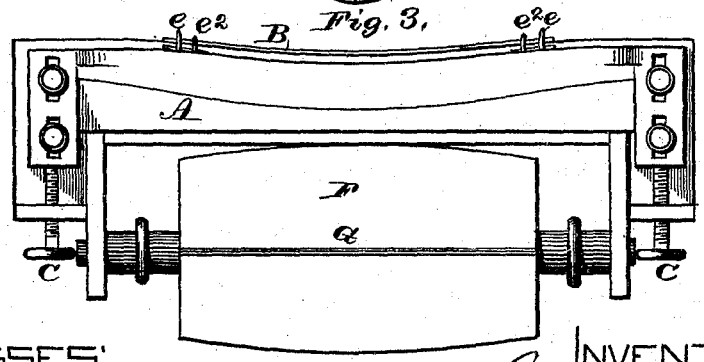


Fig. 3.



WITNESSES:

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JASPER A. WATERMAN, OF READING, MICHIGAN.

IMPROVEMENT IN VENEER-CUTTING MACHINES FOR BARREL-MAKING.

Specification forming part of Letters Patent No. **182,499**, dated September 19, 1876; application filed February 19, 1876.

To all whom it may concern:

Be it known that I, JASPER A. WATERMAN, of Reading, in the county of Hillsdale and State of Michigan, have invented certain new and useful Improvements in Veneer-Cutting Machines for Barrel-Making, of which the following is a specification:

This invention has for its object the forming of a barrel without staves, the body of the barrel being made of a continuous roll or sheet of wood cut from a log, and having the proper bilge-projection given to it in the cutting, and not formed by goring, as has heretofore been the case.

The machine for effecting this purpose is fully described as follows:

In the accompanying drawing, forming part of this specification, Figure 1 is a front elevation, Fig. 2 a vertical transverse section, and Fig. 3 a plan, of the machine.

In these figures, A is a frame, provided with a curved knife, B, which knife is adjusted in its bearings by the screws C C. The frame A is set close up to any suitable log already centered in a lathe. As the said log revolves in the lathe, it is obvious that the knife A will rapidly reduce it to a continuous sheet as long as it is fed up to the log. Near each end of the knife A is a beveling-knife, D, and near each knife D are two cutters, e e^2. The outer cutters e e cut the sheet of wood to the desired length for the height of the barrel, and the inner cutters e^2 e^2 cut the croze in the barrel-sheet, while the beveling-knives D D form the chimes. As the sheet of wood thus cut passes from the knife A, it is guided through and between the two rolls F F^2, between which rolls the sheet has its bend reversed, so that the crozes and chimes are set to the inside of the sheet. The roll F, being a "former," or facsimile of the diameter and length of barrel, is provided with a longitudinal knife, G, which at every revolution of the roll F severs a length of wood sufficient to form the circumference of the body of one barrel. The said knife, instead of being a straight line, may be curved or irregular in shape at its cutting-edge, so that the seam of the barrel shall not form a straight line, but shall be either a curved line, or a line made up of a series of curves or broken lines. The two rolls F F^2 are mounted in suitable bearings, and a rubber or other spring unites the two rolls, in order that sufficient spring may be permitted to the roll F to allow for the projection of the knife G beyond its surface.

By the coaction of these several devices, a most efficient and simple machine is made to continuously turn out "barrel-blanks" all ready for hooping and heading.

Having thus fully described these improvements in machines for making barrels as of my invention, I claim—

1. The curved knife B, for cutting a bilge-shaped sheet of wood, in combination with rolls F F^2, substantially in the manner hereinbefore described, for the purpose set forth.

2. The combination, with the knife B, of the shaping-roll F, provided with the knife G, whereby a sheet of wood is cut from a log, and formed with a bilge-projection into a barrel-blank, substantially in the manner hereinbefore set forth.

3. The combination of the roll F, provided with the knife G, with the feed-roll F^2, whereby a sheet of wood is both fed from a log and cut into a barrel-blank, substantially in the manner hereinbefore set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JASPER A. WATERMAN.

Witnesses:
E. B. CLIZBE,
H. P. PARMELEE.