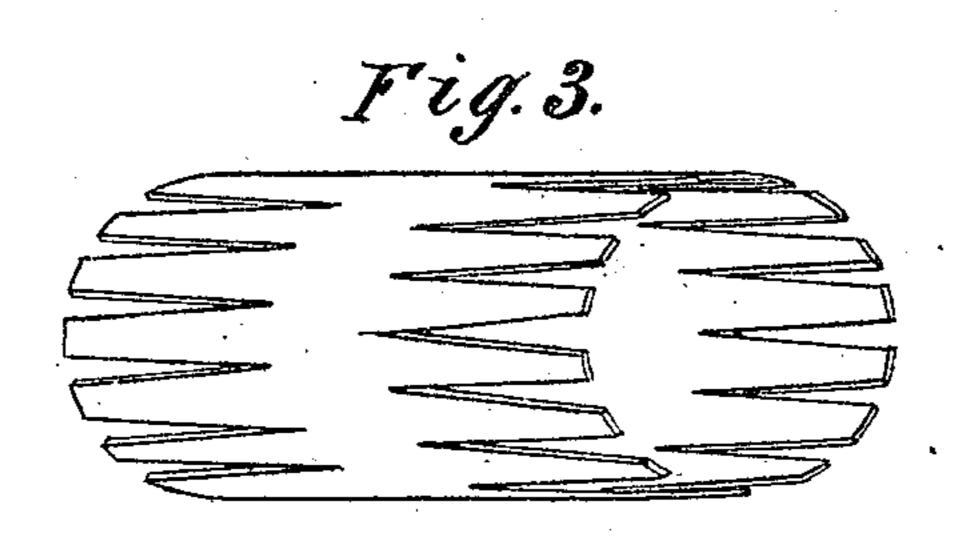
J. McGREW. Stave-Jointers.



Glonckenon John Mig Grew Attorneys.

UNITED STATES PATENT OFFICE.

JOHN McGREW, OF RAVENSWOOD, WEST VIRGINIA, ASSIGNOR TO HIMSELF AND MARGARET J. SMITH, OF SAME PLACE.

IMPROVEMENT IN STAVE-JOINTERS.

Specification forming part of Letters Patent No. 133,469, dated November 26, 1872.

To all whom it may concern:

Be it known that I, John McGrew, of Ravenswood, in the county of Jackson and State of West Virginia, have invented an Improved Stave-Jointer, of which the following

is a specification:

The invention consists in arranging one or more pairs of angle-shaped knives to reciprocate over a bearing-roll, over which the hoop is drawn for the purpose of being notched and being made to take the bulge necessary in barrels. Secondly, the invention consists in a peculiar mode of intermittently moving the roll while the said notches are cut, as hereingefor followed.

after fully described.

A represents the frame of the machine, and B the driving-shaft which is journaled therein. CC are two angle-shaped jointing-knives, which alternately cut out V-shaped pieces from the hoop, as it rests upon a cylinder, D, directly beneath said knives. These notches are not formed opposite to each other, and are intended to allow the hoop to take the bulge required. These knives C C slide up and down in the guide E, and are actuated by pivoted bars, FF, having yokes on their ends, and by cams g g of the driving shaft G. In order to feed the hoop intermittently before the knives I employ the two ratchets HH, with carryingpawls I I, to rotate it a given distance alternately, and a notched wheel, J, and detent K, to hold the roll stationary when the knives are at work. L represents a hinged bearing. piece for the roller-shaft, provided with latch l,

whereby the roll may be easily and conveniently made to receive the hoops for each barrel that have been cut from the convolute strip. M is a revolving shaft on whose end is placed a disk, m. In slots of this disk are placed the crozing tool N, chamferer O, and two edge-

trimmers, PP.

The barrel having been formed, the edge of one end and then of the other is placed under and against the outer edge of disk, while the shaft M revolves and the barrel is stationary. The tool N then cuts the croze or circular groove into which the head fits, the tool O cuts the inner bevel, and the tools P P trim the top edge of barrel. The tools N O are attached to lever-stocks Q Q, which are pivoted and caused, by springs or a sliding ring, R, to be fed gradually to the barrel as they do their work.

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

Patent, is—

1. The jointer provided with one or more pairs of angle-knives, CC, arranged to operate alternately upon different edges of blank, as and for the purpose set forth.

2. The ratchets H H, pawls I I, notched wheel J, and detent K, combined and operated in connection with roll D, as and for the purpose described.

JOHN McGREW.

Witnesses:
Solon C. Kemon,
Chas. A. Pettit.