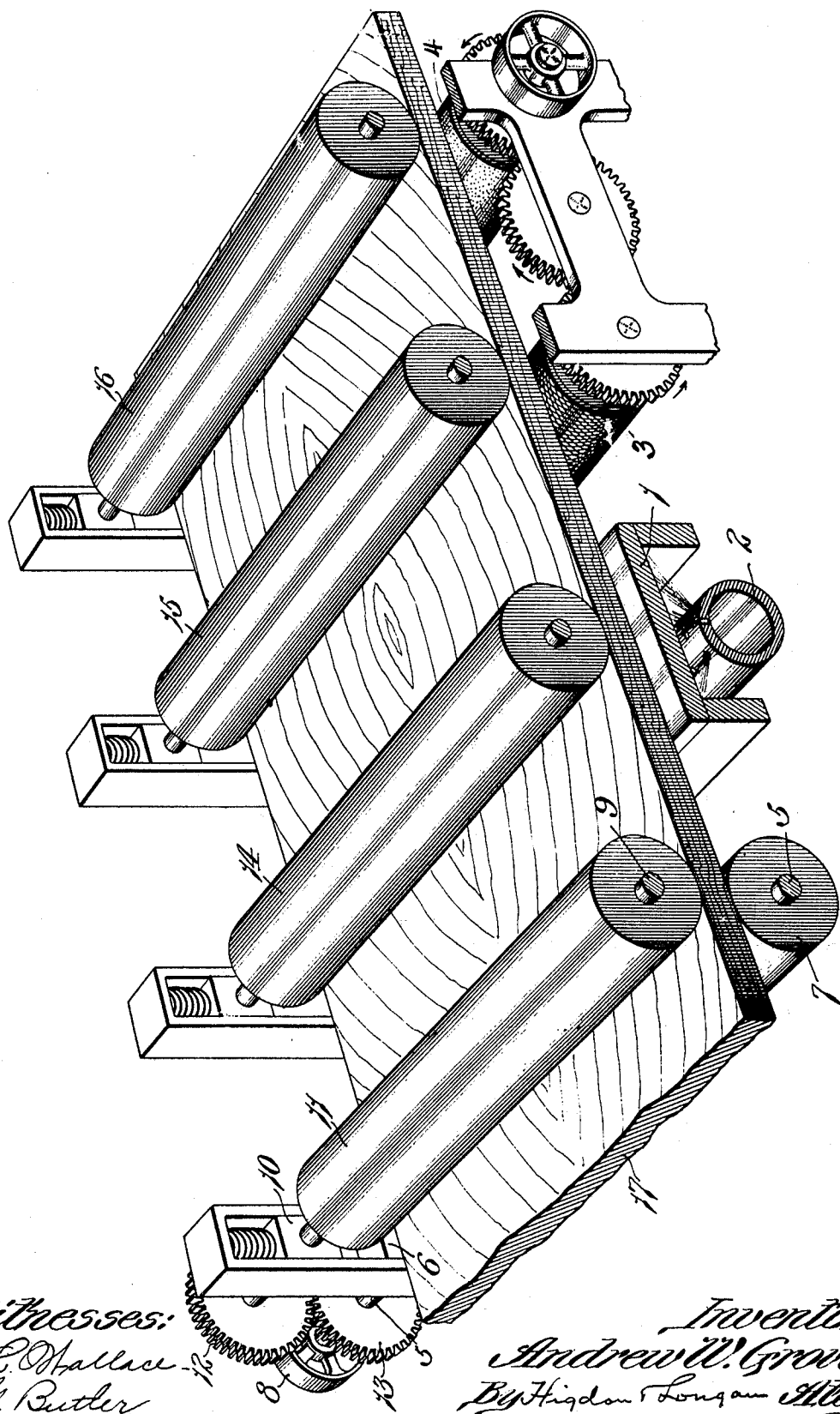


A. W. GROVES.
MACHINE FOR CHARRING AND FINISHING PLANE ARTICLES.
APPLICATION FILED DEC. 9, 1911.

1,055,271.

Patented Mar. 4, 1913.



Witnesses:
E. L. Wallace
N. G. Butler

Inventor,
Andrew W. Groves.
By Higdon & Longman Attys.

UNITED STATES PATENT OFFICE.

ANDREW W. GROVES, OF WASHINGTON, MISSOURI.

MACHINE FOR CHARRING AND FINISHING PLANE ARTICLES.

1,055,271.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Application filed December 9, 1911. Serial No. 664,909.

To all whom it may concern:

Be it known that I, ANDREW W. GROVES, a citizen of the United States, and resident of Washington, Franklin county, Missouri, have invented certain new and useful Improvements in Machines for Charring and Finishing Plane Articles, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in machines for charring and finishing plane articles, and the object of my invention is to construct a simple machine comprising a fixed heated element, and fixed roughened elements, and means for holding and moving articles having plane surfaces over said fixed elements whereby said articles will be charred, the charred portions removed and the articles smoothed, and whereby such articles as pieces of lumber may be finished to withstand the action of the elements when used for outside structures and fumed for color when used in the construction of furniture and inside wood work.

With the above purposes in view my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claim and illustrated by the accompanying drawing, in which the figure represents a machine embodying my invention.

Referring by numerals to the accompanying drawings: 1 designates a plate having a plane upper surface and 2 the burner located beneath the plate.

3 designates a roller having a roughened surface the roughened surface being on substantially the same plane as the upper surface of the plate 1.

4 designates a roller having a roughened surface, but in a lesser degree than the roughened surface of the roller 3.

5 designates a shaft arranged in advance of the plate 1 and in a plane beneath it. This shaft is mounted in fixed bearings 6, only one of which is shown. Secured to rotate with the shaft is a feed roll 7.

8 designates a pulley arranged to be embraced by a belt, not shown, for the rotation of the feed roll 7.

9 designates a shaft paralleling the shaft 5, and located in a spring held bearing 10.

11 designates the feed roll supported by the shaft 9, and 12 and 13 designate gear wheels on the shafts 9 and 5 respectively, whereby, when the feed roll 7 is rotated in one direction the feed roll 11 will be rotated in an opposite direction. Located respectively over the plate 1 and rollers 3 and 4 are the spring pressed rollers 14, 15 and 16.

17 designates the article to be treated by the machine.

The operation of the machine is as follows: Assuming power to be applied to the pulley 8 and the feed rolls 7 and 11 rotated in opposite directions an article, such as the board 17, is inserted between the rolls for the advancement or movement of the board, and assuming further that the burner 2 has been burning a sufficient time to heat, to a very high degree, the plate 1 the board will be moved over the plate 1 and held in contact therewith by the roll 14, thus charring to an even depth the bottom face of the board. The board is then advanced over the roller 3, whose roughened surface removes the char. The board is then moved over the roller 4 to be finished, there being spring held rollers 15 and 16 over each of the rollers 3 and 4 as required to hold the board against the rollers.

I claim:

In a machine for charring and finishing plane articles, means for moving the articles, a heated element having a plane surface extended the width of the articles and in a position to engage one of the faces of the articles, so that the articles will be charred as they are being moved over said element, and means for engagement with the articles after they have been charred for partially removing the char and finishing the articles.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

ANDREW W. GROVES.

Witnesses:

E. L. WALLACE,
N. G. BUTLER.