H. A. Crossley, PATENTED APR 4 1871

Impvd. Wheel for Stave Jointers.

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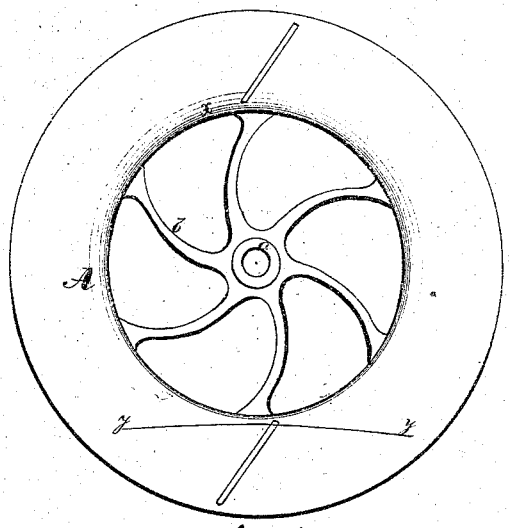

Fig. 1.

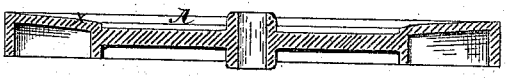

Fig. 2.

Witness,
Geo. W. Gibbs
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United States Patent Office.

HARRY A. CROSSLEY, OF CLEVELAND, OHIO.

Letters Patent No. 113,268, dated April 4, 1871.

IMPROVEMENT IN STAVE-JOINTERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, HARRY A. CROSSLEY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain Improvement in Wheels for Stave-Jointers, of which the following is a specification.

The nature of this invention consists in the construction of the face of the wheel in a straight line from the periphery to a point three-fourths the distance therefrom, and thence curved down to the inner circle, the cutters being ground in conformity with the said curve.

The object in thus curving the face of the wheel off at the inner circle is to cause the wheel to shave off less at the bilge or central part of the stave, and make the edge of the stave, from the ends to the commencement of the bilge, in nearly a straight line. This makes the staves fuller at the bilge, and when placed together in the barrel will bind closely together at the bilge and make a tight joint.

In the drawing—

Figure 1 represents a plan of the wheel.

Figure 2 is a sectional view cutting the wheel crosswise to show the line *x*, which embodies my improvement.

A represents the jointing face of a wheel, said wheel being constructed in the usual way with spokes *b* and a hub, *c*.

The face A of the wheel, in which is embodied my improvement, I construct as follows:

Beginning at the periphery, the line *x* of the face toward the center of the wheel is straight, but bears slightly downward toward the center of the wheel, so that the whole face of the wheel is slightly conical; but before the line *x* reaches the inner circle of the face A it is curved slightly down to the edge of said inner circle, making thereby a portion of the face a little raised.

The object in thus forming the face of the wheel is so as not to cut away or shave off so much at the middle of the stave at what is termed the bilge, as would be the case if the face of the wheel were not rounded down.

This makes the bilge of the stave full, and the joint will be as tight there as at any other part, and this enables the workman to make a more perfect joint than can be done by hand.

The main difficulty with all jointers not having this peculiar face is that they cut away too much at the bilge; consequently the joint is not perfect at that point.

By referring to the line *y y* in fig. 1, it will be seen what the line is, and how it is imparted to the edge of the stave.

I claim—

The wheel A, constructed as herein shown and described, the face being in a straight line from the periphery to a point three-fourths the distance therefrom of the width of the face, and then curved down to the inner circle, as at *x*, the cutters being ground in conformity with the said curve, for the purpose specified.

HARRY A. CROSSLEY.

Witnesses:

GEO. W. TIBBITTS,

GEO. HESTER.