W. H. Rodeheaver,

Making Fellies.

No. 108,189. Patented Oct. 11, 1870.

Fig. 1.

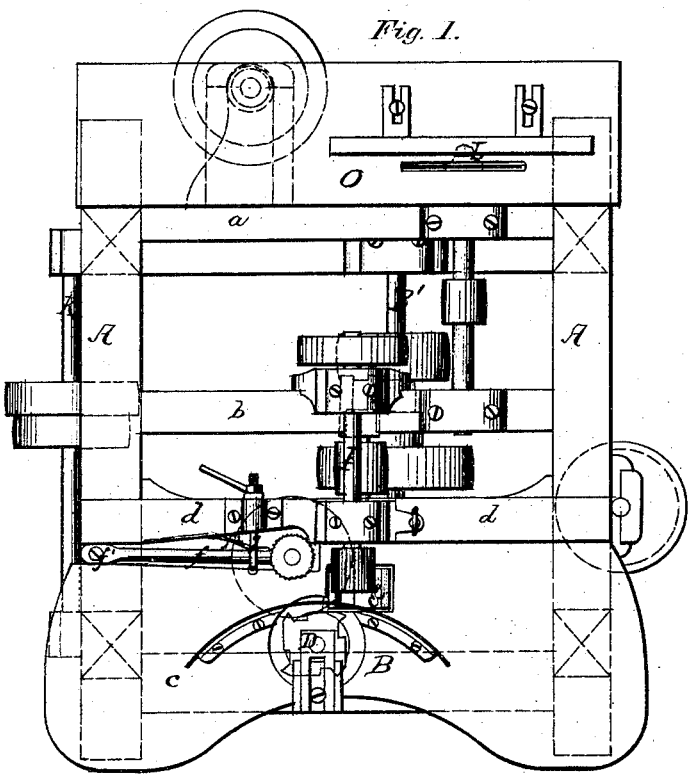
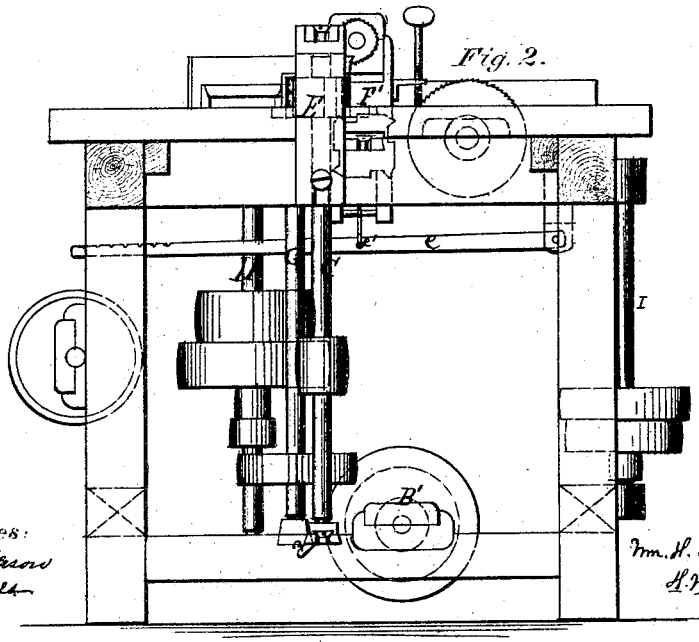


Fig. 2.



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United States Patent Office.

WILLIAM H. RODEHEAVER, OF MIAMISBURG, OHIO.

Letters Patent No. 108,189, dated October 11, 1870.

IMPROVEMENT IN MACHINES FOR DRESSING FELLIES.

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

To all whom it may concern:

Be it known that I, WILLIAM H. RODEHEAVER, of Miamisburg, in the county of Montgomery and State of Ohio, have invented a new and useful Improvement in Felly-dressing Machine; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to machines for dressing fellies, and consists of certain improvements, to be hereinafter more fully described, for facing and planing the inside of bent fellies at one operation.

In the drawing—

Figure 1 represents a plan view, and

Figure 2, a side elevation of my improved felly-dressing machine.

The main frame-work of the machine I have represented consists of a foundation-frame, from which rise four posts, surmounted by longitudinal beams, A A.

Across these are other beams, *a*, *b*, *c*, and *d*, the latter being a piece resting on the beams A A.

C is a vertical shaft, carrying a cutter-head, which rises just above the table bed-plate B, the lower end of the vertical shaft resting in a step in one of the lower cross-beams.

The upper end is held by a pivot-box, D, which is supported by a post, E, bolted to the upper front cross-beam.

The post E is adjustable in height, so as to allow the shaft to be kept always firm in its bearings.

The pivot-box is also adjustable to and from the convex-guide, allowing the cutter-head to be set for cutting at greater or lesser depth.

C′ is a horizontal cutter fixed on its proper shaft, the cutter working through a throat in the bed-plate B. This shaft is driven from the horizontal shaft below.

F is a horizontal feed-shaft, having a feed-roller on its front end, properly arranged in relation to the guide and cutters, and on its rear end a driving-pulley, arranged over a horizontal shaft beneath.

The front end of the feed-shaft revolves in a journal bearing resting on a post, F″, which passes through a slot in the cross-beam *d*.

To the lower end of this, which projects through the slot, is attached a lever, *e*, pivoted at *e′*, and adapted to carry a weight on the opposite end, the whole being so arranged that the weight tends to draw down the post F″ and press the feed-roller upon the felly.

To the upper end of the post is fixed a foot, through which passes a thumb or cranked screw, the lower end of which rests on the cross-bar *d*. This permits the feed-roller to be adjusted to different sizes of felly, the weight always keeping the point of the screw in contact with the cross-bar.

G is a vertically-arranged feed-shaft. It rests in a stop on one of the cross-beams in the lower part of the frame, and its upper end rotates in an arm, *f*, which is pivoted at *f′*, and pressed forward by a spring, *f″*, toward the front or vertical cutter. Its motion is limited and adjusted by a bolt, *g*, having a hook on one end, which passes around the bar, and on the other a thumb or tail-nut.

By this device the pivoted bar, with the vertical feed-roller, is drawn back or allowed to move forward, thus adapting the parts to the size of the felly.

H is a vertical driving-shaft in the rear of the machine, suitably held in bearings, and carrying a large driving-pulley, which drives the vertical cutter-shaft.

I is a vertical counter-shaft, carrying pulleys, as shown, driven from H, and communicating motion to the vertical feed-shaft.

K is a counter-shaft, on the left-hand side of the machine, having a large cam-pulley, driven from a small one on shaft B′, and also driving, through a small pulley, the horizontal feed-shaft.

L is a saw-mandrel, with saw attached, conveniently arranged on the machine, as shown.

The table or bed-plate B can be adjusted in height by set-screws, to regulate the depth of the cut.

The curved guide-plate is fixed thereto for supporting the inside of the felly, the vertical cutter working through the throat therein.

O is the saw-table, with gauge attached.

The whole machine may be driven by a single shaft on the left-hand side.

When the machine is properly set, the operator passes the fellies through from right to left.

The belt may be thrown from its shaft, if the operator does not wish to run the saw; but, in this sort of machine, if the driving-shaft furnishes power enough, both may be profitably run at once by the operators.

Having thus fully described my invention, I wish it understood that the general arrangement of the driving-shaft and pulleys, which I do not specially claim, may be varied without departing from my invention.

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. The vertical cutter and shaft C, in combination

with the adjustable step c^2, pivot-box D, and adjustable pivot E, when the parts are arranged as described, for the purpose set forth.

2. The vertical feed-shaft G, in combination with the pivoted bar *f*, spring f^2, and screw-rod *g*, as described.

3. The horizontal feed-roller shaft F, with F′, lever *e*, and thumb-screw, all the parts being combined and arranged as described, for the purpose set forth.

This specification signed and witnessed this 28th day of May, 1870.

WILLIAM H. RODEHEAVER.

Witnesses:

ADAM CLAY,

AMOS K. CLAY.