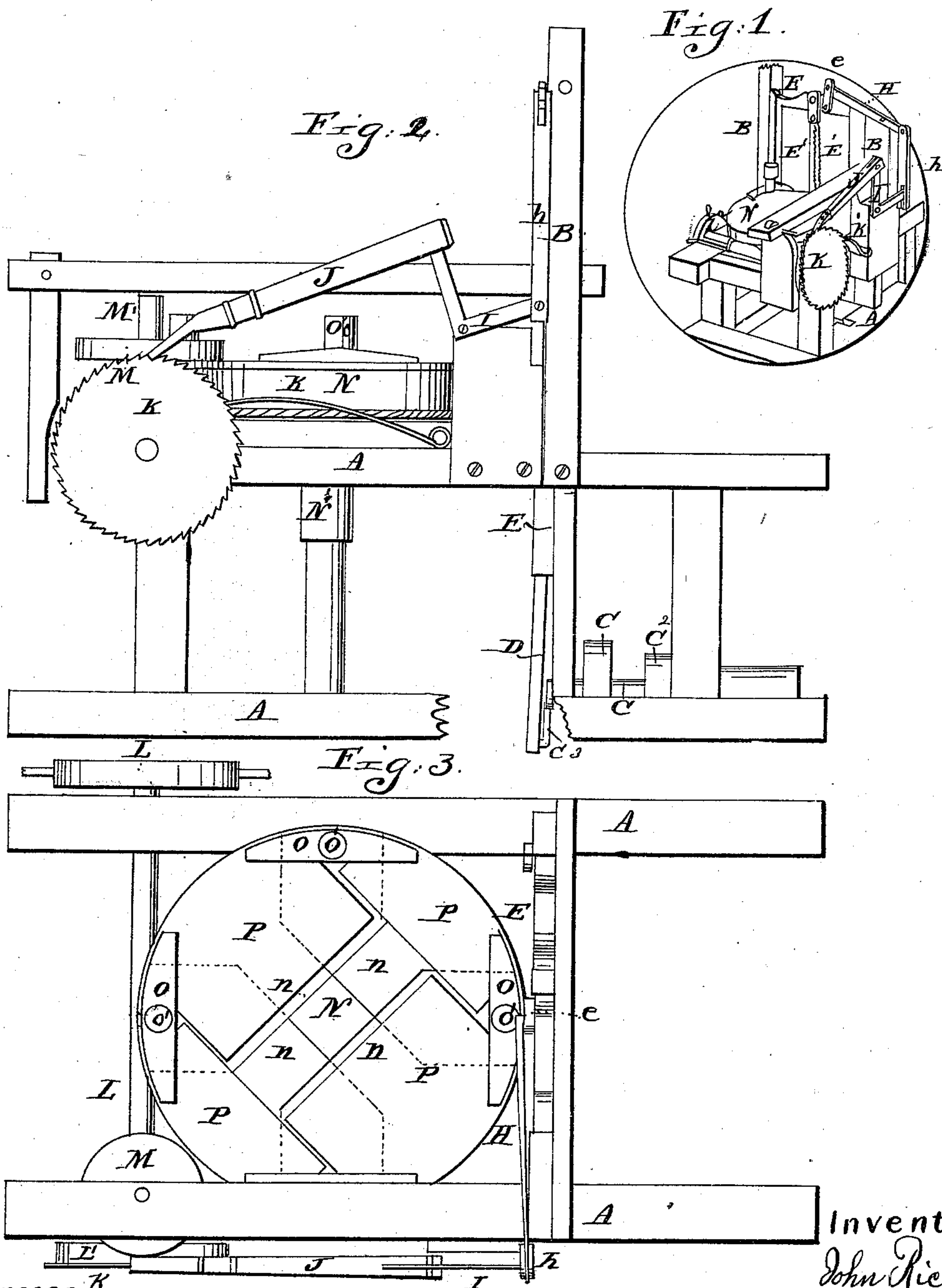


*J. Rice.*

*Sawing Machine.*

*Nº 88,586.*

*Patented Apr. 6, 1869.*



Witnesses:  
*E. J. Brown,*  
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*Atty*



# United States Patent Office.

JOHN RICE, OF BLOOMINGTON, INDIANA.

Letters Patent No. 88,586, dated April 6, 1869.

## IMPROVEMENT IN FELLOE-SAWING-MACHINES.

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, JOHN RICE, of Bloomington, in the county of Monroe, and State of Indiana, have invented new and useful Improvements in Sawing-Machines; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an improved machine for sawing wagon-felloes, chair-tops, or other similar articles, and consists in the construction and arrangement of the various parts, and their combination with each other.

The details of construction, and manner of operation, will be fully described hereinafter.

In the drawings—

Figure 1 represents a perspective view;

Figure 2, a side elevation; and

Figure 3, a plan view of my improved machine.

To enable those skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation.

A A represent the main frame of the machine, which may be constructed in any proper manner, and from which rise the standards B B, holding the saw-frame.

C represents the main shaft, upon which is placed the fly-wheel C', and pulley C'', by means of which latter the power is communicated to the machine.

The shaft C is provided with a crank, C<sup>3</sup>, to which is attached the lower end of the pitman D, which operates the saw-gate E.

Within the latter are the concave saws E' E', which are located at a suitable distance apart.

H represents a lever, pivoted to one of the standards B, which is connected at one end to the saw-gate E, by means of the bar e, and at the other to the rod h, which latter is attached to the elbow-lever I, pivoted to a standard attached to the side of the frame, as shown.

J represents a bar, provided at one end with a bent metal shoe, which rests upon the ratchet-wheel K, and which is attached at the other end to the elbow-lever I.

By means of holes in the latter, the bar J can be adjusted so as to move a longer or shorter distance, as may be desired.

K' represents a pawl, by means of which the ratchet-wheel K is either attached directly to a bevel-gear wheel, L', or to its shaft, L, as may be desired.

The gear-wheel L' engages with the gear-wheel M, attached to perpendicular shaft M', as shown, upon

which latter is a pulley, round which passes a belt, or cord, which also passes about the circular extension-table N, in a groove arranged for that purpose.

L<sup>2</sup> represents a hand-wheel, upon the end of shaft L, by means of which it may be revolved without moving the saw.

The circular extension-table N is supported by the perpendicular shaft N', which turns in suitable bearings below.

This latter is constructed with the Y-shaped pieces n n, which may be drawn outward when desired to increase the size of the latter.

O O represent clamps, which are secured to the table by means of the screws O'.

P represents the material to be sawed.

From this description, the operation of my machine will be readily understood.

The material having been properly secured to the table, the machine is set in motion.

At each movement of the saws, the table is also turned by means of the connection described, so the material is properly kept up to the saw.

As the saws are concave in form, they cannot bind up the material, and therefore work with great ease.

When it is desired to turn the table without operating the saws, the hand-wheel L<sup>2</sup> is used.

By adjusting the bar J to traverse a longer or shorter distance, the material may be fed faster or slower, as may be desired.

This machine has proved itself to be exceedingly efficient in turning out work rapidly, it being capable of sawing from fifteen hundred to two thousand felloes per day.

Having thus fully described my invention,

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

The sawing-machine described, consisting of the frame A, standards B, shaft C, pitman D, saw-gate E, saws E', levers H and I, bar J, ratchet-wheel K, shaft L, gear-wheels L' M, and extension-table N, the whole being combined and operated in the manner and for the purpose set forth.

This specification signed and witnessed, this 28th day of September, 1868.

JOHN RICE.

Witnesses:

WM. M. TATE,

HENRY FELLOWS.