(No Model.) 2 Sheets—Sheet 1.

J. R. RIPLEY.

CIRCULAR SAWING MACHINE.

No. 384,176. Patented June 5, 1888.

Fig. 1.

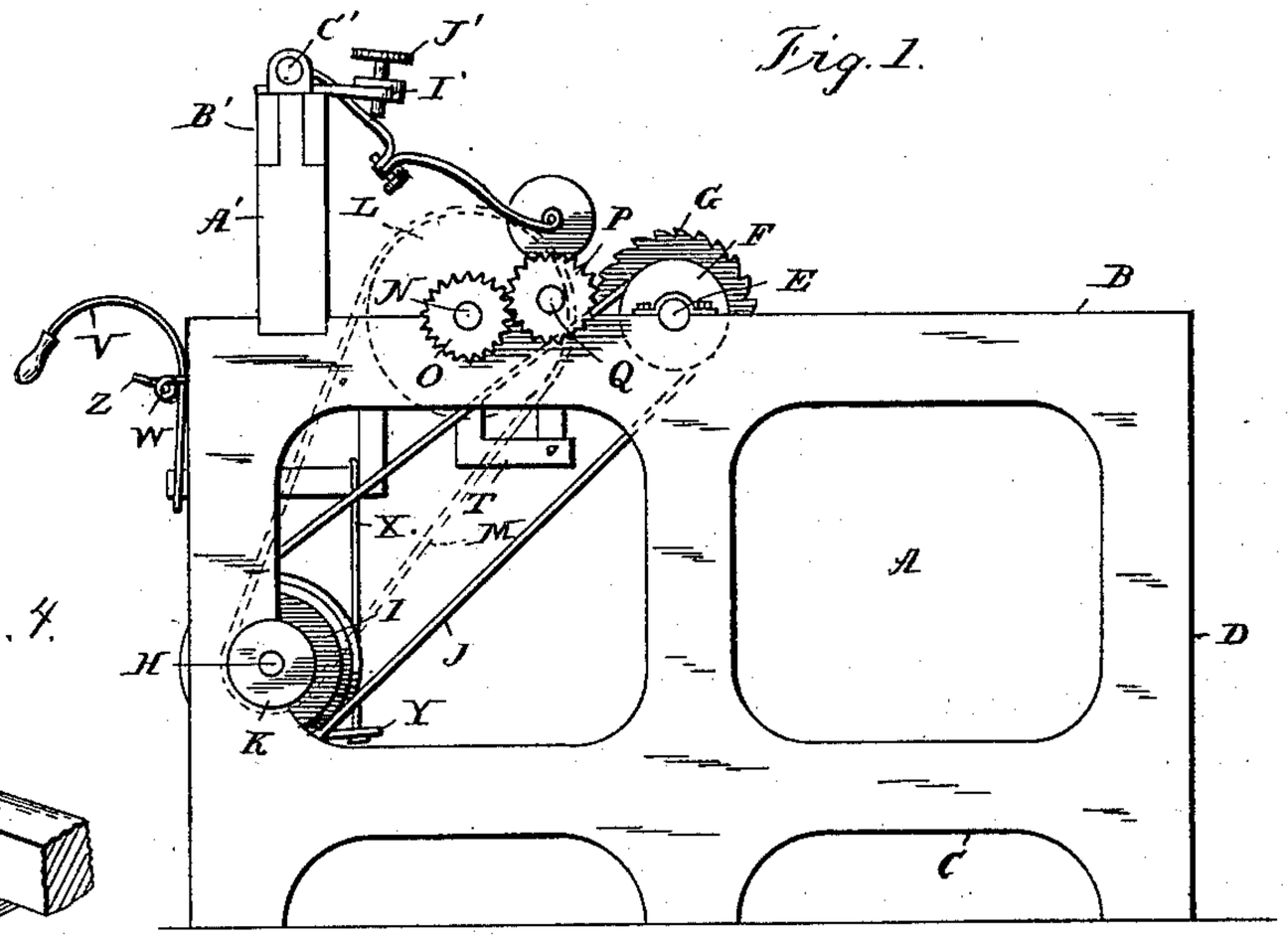


Fig. 4.

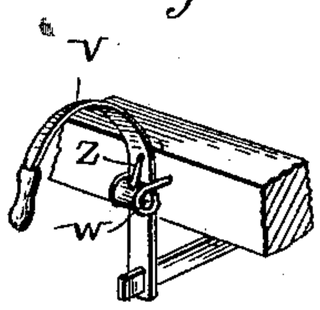


Fig. 2.

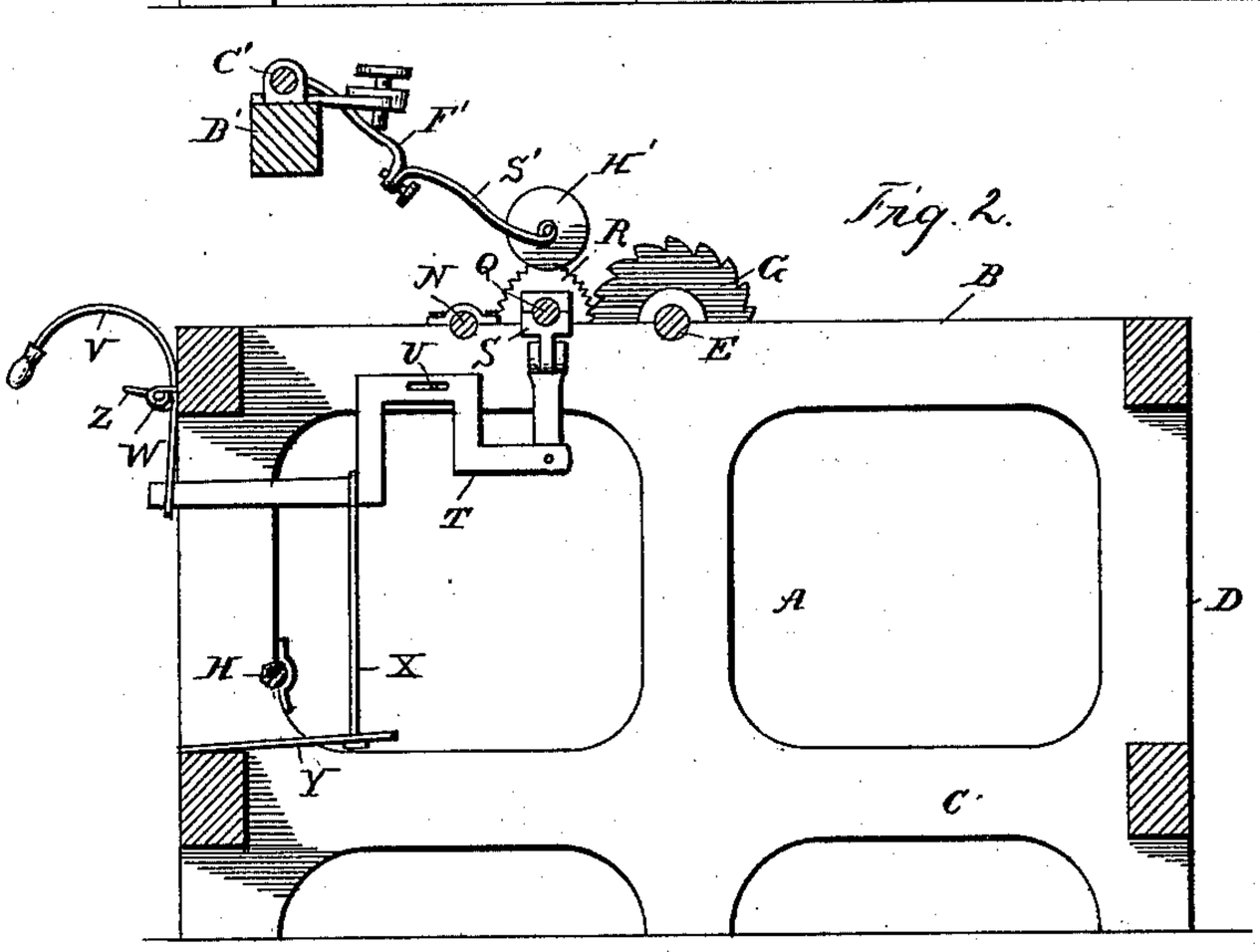
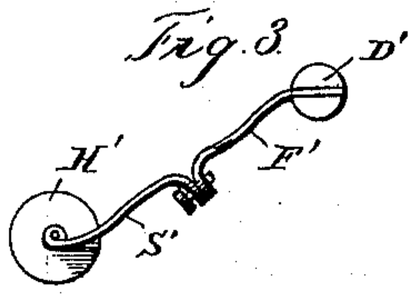


Fig. 3.



Witnesses.
Edwin L Bradford.
Frank Darian.

Inventor.
James R. Ripley.
By his Attorney A. Gilbert.

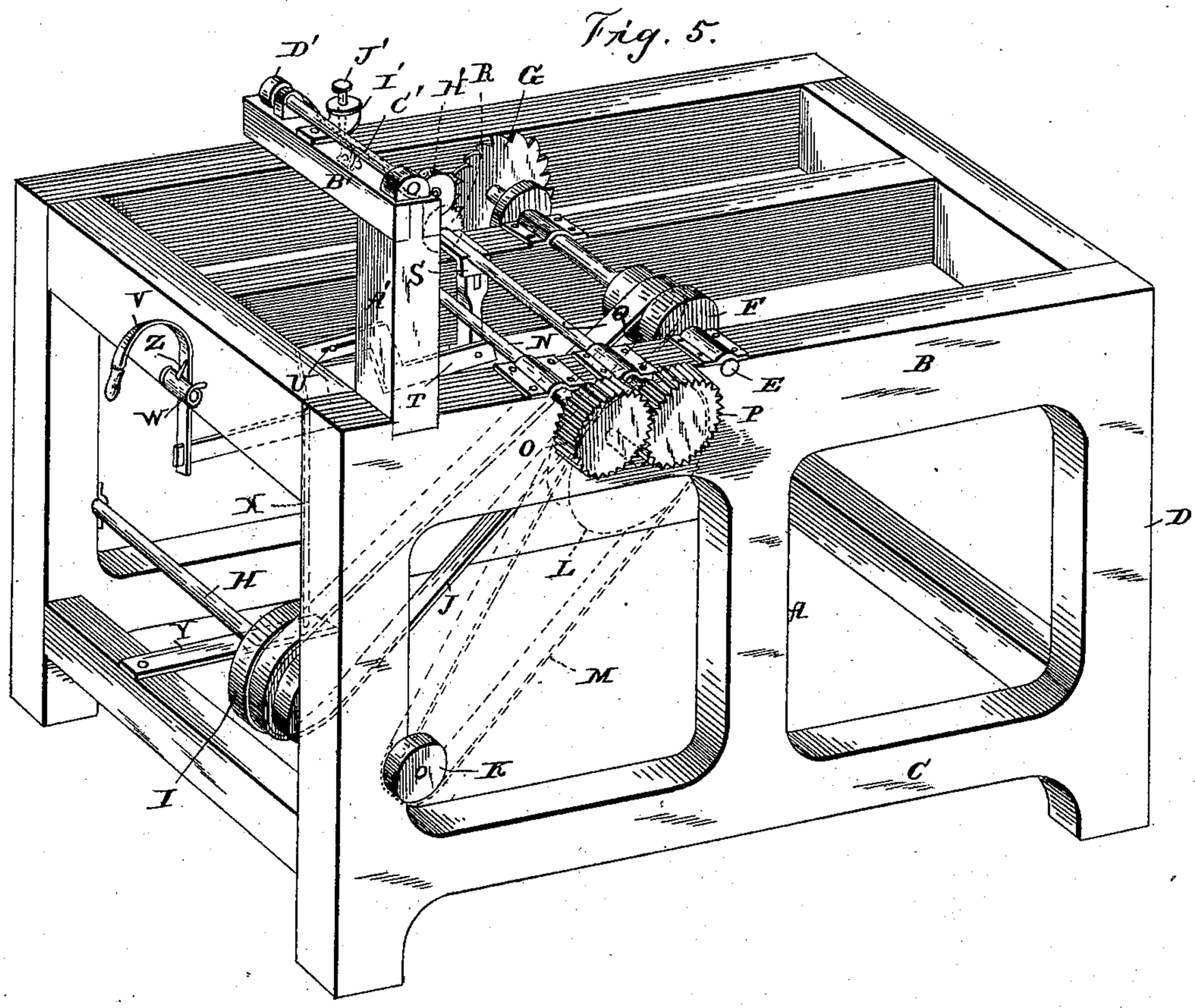
(No Model.) 2 Sheets—Sheet 2.

J. R. RIPLEY.

CIRCULAR SAWING MACHINE.

No. 384,176. Patented June 5, 1888.

Fig. 5.



Witnesses,
Edwin L. Bradford.
Arthur Hendricks.

Inventor.
James R. Ripley
By his Attorney.
A. B. Mott

UNITED STATES PATENT OFFICE.

JAMES R. RIPLEY, OF MEMPHIS, TENNESSEE.

CIRCULAR SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 384,176, dated June 5, 1888.

Application filed January 21, 1888. Serial No. 261,526. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. RIPLEY, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Self-Feed Rip-Sawing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention has relation to certain new and useful improvements in circular sawing machines; and it consists in certain peculiarities in the construction, arrangement, and combination of parts, substantially as hereinafter described, and particularly pointed out in the subjoined claims.

In the accompanying drawings, forming a part of this specification, and on which similar letters of reference indicate the same or corresponding features, Figure 1 is a side elevation of my improved invention. Fig. 2 is a longitudinal sectional view of Fig. 1, and Fig. 3 is a detail view of the frame supporting the presser-roller. Fig. 4 is a detail showing part of the adjusting mechanism. Fig. 5 is a perspective view of my improved circular sawing machine.

The letter A designates a frame made of wood or metal, and preferably of the configuration shown, and consisting, essentially, of the upper and lower beams, B and C, there being two of each, united by cross-pieces and supported by the upright standards D. Mounted upon the upper beams, B, and near the center thereof, and in suitable bearings, is a shaft, E, provided with a pulley, F, at one end and at its other with a circular saw, G. Mounted upon the forward standards near the lower beams, C, is the shaft H, provided with a pulley, I, and connected with the shaft E by a belt, J. This shaft H receives its motion from an engine or other suitable driving-power, which, through the belt J, revolves the shaft E and the saw G. The near end of this shaft is provided with a pulley, K, which is connected with a larger pulley, L, (shown in dotted lines,) by means of a belt, M. This pulley L is mounted on a shaft, N, the inner surface of said pulley being provided with a gear-wheel, O, which meshes with the gear-wheel P, mounted on the shaft Q, the other end of said shaft Q being provided with a small circular serrated disk or roller, R, for the purpose of feeding the lumber. The farther end of this shaft Q, instead of being mounted in the frame proper, is mounted in an adjustable bearing, S, attached to a lever pivoted to the frame at U, and having attached to its rear end a strap, V, passing over a roller, W, so that the adjustability of the bearing may be regulated by the operator (as he may desire) from the end of the table. This lever is also connected by a rod, X, with a treadle or footboard, Y, so that the operator, should he desire to adjust the bearing while his hands are employed, can do so by his foot.

The roller W is provided with a point or spike, Z, for the purpose of holding the strap V in any set position.

The upright standard A′ has a laterally-extending arm, B′, dovetailed therein, and mounted upon this arm is a shaft or rod, C′. This rod C′ at its farther end, as seen in Fig. 3, is provided with a slotted head, D′, in which is mounted the spring-arm E′, consisting of the two portions F′ and S′, pivoted together, and the latter portion provided at its lower end with a presser foot or roller, H′, the purpose of which is to yieldingly press and hold down upon the disk R the incoming board, which is thus fed to the saw G. The disk R is adjustably mounted, or rather its shaft is adjustably mounted, so that its position may be changed according to the thickness of the material to be sawed.

As seen in Figs. 1 and 2, I provide the arm B′ with a slight forward extension, in which is mounted a set-screw, J′, the lower end of which bears upon the spring-arm F′, so that the roller may be adjusted and its pressure lessened or increased, as desired.

For the purpose of better illustrating my invention I have removed the top or cover from the beams B; but in practice one is of course provided having slots through which the working parts may play, and when desired I provide said top with markers or gages, &c.,

such as are ordinarily or commonly used, and which, not being a part of my invention, I will not here enter into a description of.

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

1. The combination, with the main frame, saw, and saw-operating mechanism, of a presser-roll supported above the main frame by a pair of spring-arms pivotally secured to each other, in the manner and for the purposes herein set forth.

2. The combination, with a saw, means for driving the same, a feed-roller shaft having a gear, and an auxiliary shaft provided with a gear adapted to engage the gear on the feed-roller shaft, of a presser-roll supported by a pair of spring-arms, the adjacent extremities of which are pivotally secured together, and a set-screw to regulate the pressure of the presser-roll.

In testimony whereof I affix my signature in presence of two witnesses.

JAS. R. RIPLEY.

Witnesses:
JOHN J. WALSH,
JNO. B. TAYLOR.