

(No Model.)

J. S. REID.

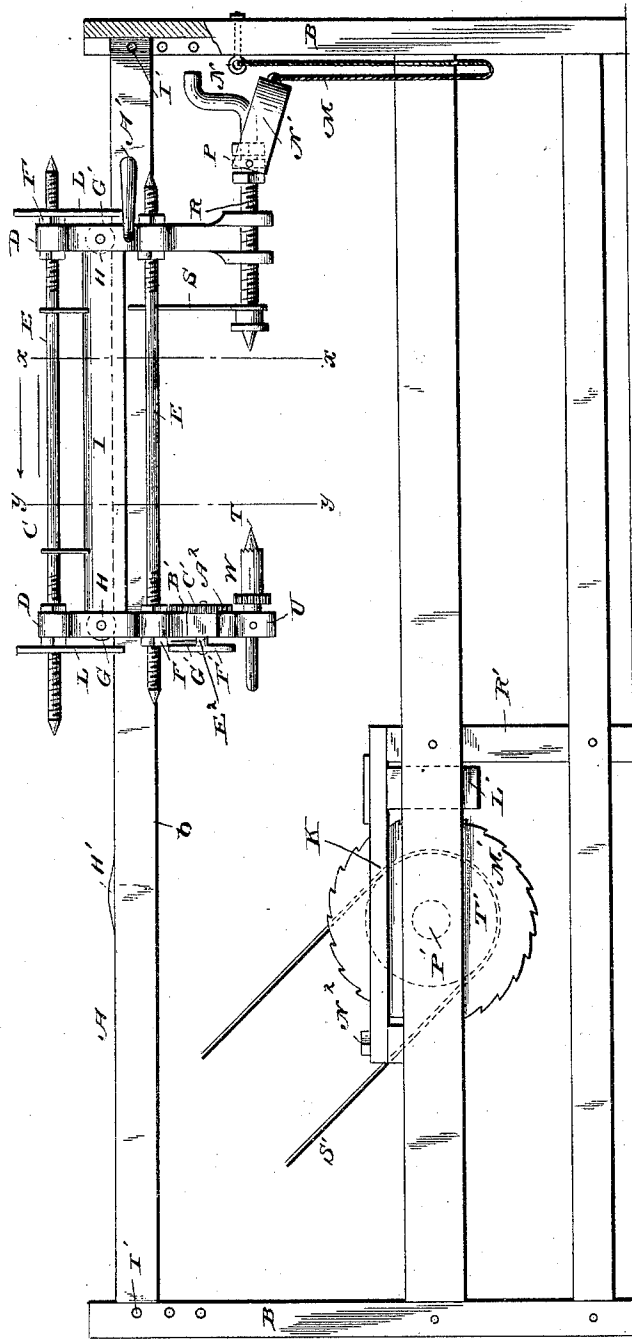
2 Sheets—Sheet 1.

RADIAL CENTER SAWING MACHINE.

No. 476,820.

Patented June 14, 1892.

Fig. 1.



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(No Model.)

2 Sheets—Sheet 2.

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RADIAL CENTER SAWING MACHINE.

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Fig. 2.

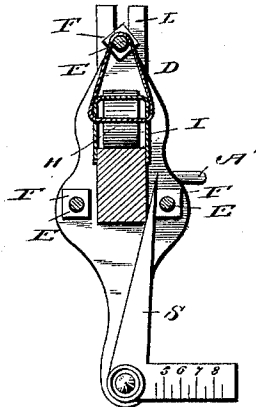


Fig. 3.

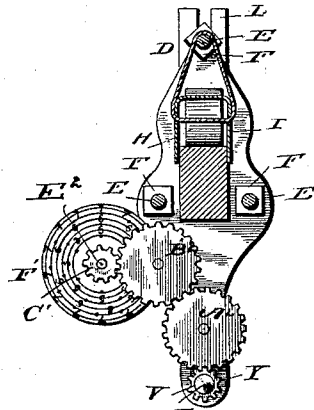
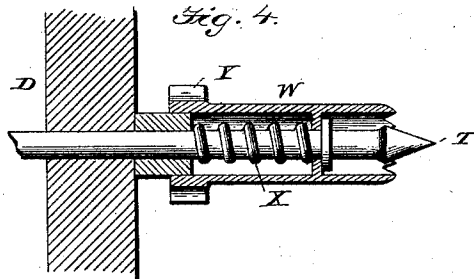


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN STERETTE REID, OF MUNCIE, INDIANA.

RADIAL-CENTER SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 476,820, dated June 14, 1892.

Application filed March 9, 1891. Serial No. 384,313. (No model.)

To all whom it may concern:

Be it known that I, JOHN STERETTE REID, a citizen of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in Radial-Center Sawing-Machines; and I do hereby 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.

This invention relates to improvements in radial-center sawing-machines; and it has for its objects to provide for gaging the butt or block to be sawed, so as to cut the strips of uniform size, as more fully hereinafter explained.

The above-mentioned objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of the machine; Fig. 2, a cross-section of a portion of the machine, taken on the line *x x* of Fig. 1. Fig. 3 is a similar view looking from the opposite direction, taken on the line *y y* of Fig. 1. Fig. 4 represents a longitudinal sectional view of one of the centers of the machine, showing a sleeve which actuates the indicator to gage the width of the strips or spoke-billets to be cut.

Referring to the drawings, the letter A indicates the main frame of the machine. At each end of the main frame, at one side thereof, are located vertical standards B, which preferably constitute a continuation of two of the corner-posts of the frame with short posts and extend above the top thereof, forming a support for a rectangular bar *b*.

The letter C indicates a carriage consisting of two hangers D D, which are connected together adjustably by means of screw-threaded rods E and nuts F to accommodate the machine to butts of different lengths. The said hangers are provided with rectangular slots G, in the upper part of which are journaled rollers H. The hangers are arranged to ride upon the bar *b*, the slotted portions setting over the same and the rollers being arranged to travel on the upper surface of said bar. To the upper rod E is secured a metallic shield I, which extends over the bar and keeps it clear of sawdust, and the said rod is also pro-

vided with adjustable scrapers L, which remove any sawdust that may be deposited upon the bar as the carriage travels back and forth.

M indicates a rope, one end of which is fastened to the main frame at N and the other to a bail N', which is swiveled to a cross-bar P, secured to the rear center R of the machine, in order to limit the forward motion of the carriage, which may be imparted by hand or by any suitable known mechanism for the purpose. The said center is screw-threaded and extends through a threaded bearing at the lower end of the rear hanger, the forward end being provided with a center-point and thimble and the rear end with a crank or lever, by means of which said center may be turned. Near the forward end of said center is secured an angle-arm S, by means of which the diameter of the butt or block is measured when secured between the centers.

The letter T indicates the forward center, which is secured in a head U at the lower end of the forward hanger of the carriage. The said center is directly in line with the rear carriage and has a ring or thimble, as shown at V.

The letter W indicates a sleeve, which sets over the ring or thimble and the spiral spring and forward center, and which is pressed normally forward by a spiral spring X, as shown in Fig. 4 of the drawings. The said sleeve at one end is provided with a pinion Y, which intermeshes with one of a train of intermeshing gear-wheels A² B', the wheel B' intermeshing with a pinion C' on one end of a short shaft E², journaled in a lateral arm projecting from the forward hanger. To the other end of said shaft is secured a disk F', carrying a graduated dial on one of its faces.

G' indicates an index or pointer fastened to the forward hanger and extending in front of the dial before mentioned. The end of the sleeve opposite the pinion Y is serrated, and being pressed by said spiral spring, so as to engage the end of the butt and be turned thereby, as desired, when the butt is turned.

The top of the bar *b* is provided with a slight abutment at H', which causes the carriage to rise to prevent the lower edge of the carriage from coming into contact with the saw when it is wanted, especially when sawing small butts, to saw nearer the heart. The bar is ad-

justably secured in its standards and held by means of pins I', so that it may be elevated or lowered to suit butts or blocks of different diameters.

- 5 The letter K indicates a slotted board or frame, through which the saw works. The said board is provided with a chute L' for carrying the sawdust or depositing it at one point. The board is confined to the main frame by
10 means of a bolt and nut N².

The letter M' indicates the saw, which is of a circular variety and mounted on a shaft P', journaled in bearings in a frame R' and driven by a belt S', passing over a pulley T' on said
15 shaft.

A' indicates a set-screw tapped through the rear hanger D and provided with a crank-handle, as shown. In putting in or taking out the butts said handle is given a slight turn,
20 which causes the set-screw to bear against the bar b, and thus lock the carriage against any forward or backward movement thereon.

The operation of my invention is as follows: The butt or block is centered between the two centers and chucked to the serrated
25 end of the sleeve. The diameter is then determined by means of the gage at the rear center. When thus determined, the corresponding number on the dial shows the proper degree of rotation of the butt to space each
30 strip as the butt is turned. The carriage is pushed forward over the saw by hand or otherwise.

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

1. In a radial-center sawing-machine, the combination, with a way and a carriage traveling thereon, of an adjustable center and a
40 fixed center, a sliding sleeve mounted on said fixed center and provided at its rear end with a pinion, gear-wheels meshing with said pinion, a pinion on a shaft carrying a dial-disk, an index or pointer for said dial-disk, and
45 a gage carried by the adjustable center, all constructed and arranged whereby the butt may be gaged to regulate the width of the strips to be cut, substantially as specified.

2. In a radial-center sawing-machine, the
50 combination of a way and a carriage travel-

ing thereon, a fixed and an adjustable center carried by said carriage, a sliding sleeve loosely mounted on the fixed center and serrated at its front end and provided with a pinion at its other end, a spiral spring for forcing
55 said sleeve against the butt, a dial-disk, and gears actuating said dial-disk and meshing with said pinion when the butt is in position, substantially as shown and described.

3. In a radial-center sawing-machine, the 60 combination of the main frame, the bar b, and the carriage consisting of the hangers D, united by the threaded shafts E and provided with rollers H H, adapted to travel on the bar
65 b of the shield I, suspended from the top shaft E and straddling the bar b, substantially as shown and described.

4. In a radial-center sawing-machine, the combination of the main frame, the bar b, the carriage consisting of the hangers D, united
70 by the threaded shafts E and provided with rollers H, adapted to travel on the bar b, the shield I, suspended from the top shaft E and straddling the bar b, and the adjustable scrapers L, carried by the top shaft E, substan-
75 tially as shown and described.

5. In a radial-center sawing-machine, the combination of the frame, a way, a carriage traveling thereon and provided with centers for holding a butt, the bail N', pivoted to
80 one of said centers, and a rope connected to said bail and to the frame, substantially as shown and described, and for the purpose specified.

6. In a radial-center sawing-machine, the 85 combination of the main frame, the vertical standards B, each provided with a series of apertures, the bar b, vertically adjustable on said standards and secured thereto by pins I', a carriage traveling on said bar and provided
90 with centers for holding a butt, and a saw mounted in fixed bearings in the main frame, substantially as shown and described.

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

JOHN STERETTE REID.

Witnesses:

JAMES N. TEMPLER,

WILLIAM N. WILLIAMS.