

C. W. SHIBELEY & E. P. WRIGHT.
Circular Sawing-Machine.

No. 206,838.

Patented Aug. 6, 1878.

Fig. 1.

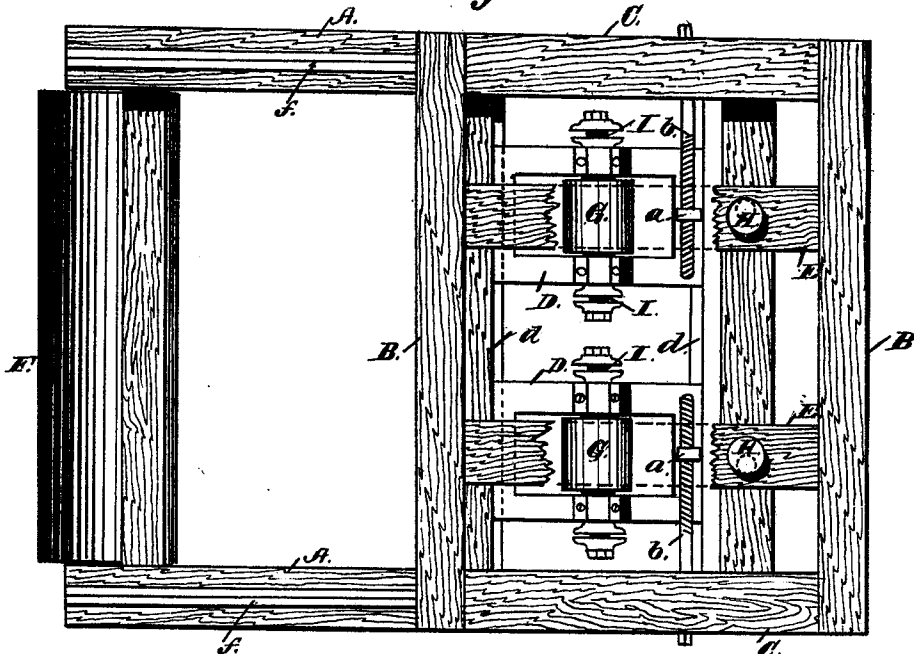
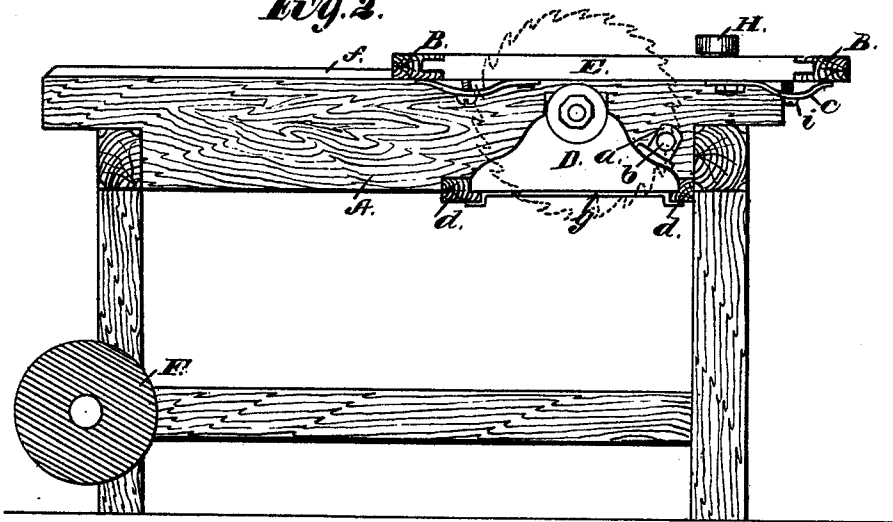


Fig. 2.



Witnesses:

Chas. M. Peck
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Inventors:

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by their Attys
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UNITED STATES PATENT OFFICE.

CHARLES W. SHIBELEY AND EZRA P. WRIGHT, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN CIRCULAR SAWING MACHINES.

Specification forming part of Letters Patent No. **206,838**, dated August 6, 1878; application filed May 27, 1878.

To all whom it may concern:

Be it known that we, CHARLES W. SHIBELEY and EZRA P. WRIGHT, of Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Saw-Frames; and we do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to an improvement in that class of circular saws which are provided with sliding tables for holding and advancing the work.

The novelty consists in the peculiar construction of the sliding work-table provided with laterally-adjustable shelves and cam-bearing guides, and in the combination, with the sliding table, of laterally-adjustable arbor-blocks, all as will be herewith set forth and specifically claimed.

In the accompanying drawings, Figure 1 represents a plan view of our improved saw-frame. Fig. 2 is a central sectional view of the same in side elevation.

Corresponding letters of reference indicate like parts in both the figures.

Upon the top of a suitably-constructed frame or table are arranged, one on each side, two horizontal parallel beams, A, provided on their tops with V-shaped rails *f*, which serve as guides for the sliding work-carriage.

Across the forward end of the table, between the lower edges of the beams A, are two horizontal parallel beams, *d*, with their inner edges rabbeted to form guideways for the sliding arbor-blocks D. These latter are two rectangular frames, as shown, in the tops of which the arbors or saw-spindles I are journaled.

The blocks D fit snugly in the ways between the beams *d*, and are held from displacement, though not prevented from sliding laterally, by metal strips *g*, Fig. 2, bent at their ends, so as to embrace the edges of the beams *d*, as indicated.

The saw-spindles are provided with pulleys G, which are rotated by belts passed over a drum, F, journaled in the table, as shown.

To adjust the carriages D by sliding them laterally, each is provided with a fixed nut, *a*, in which a worm shaft or screw, *b*, fits, and has

its outer end journaled and held in any suitable manner in the beams A or in the frame-work.

By means of cranks or wrenches applied to the outer ends of the screws *b* the latter may be rotated to slide the carriages into the required positions.

Both ends of the arbors I may be provided with clamps for holding saws, as seen in Fig. 1.

The sliding work-carriage is composed of a flat rectangular frame, B C, grooved on its under side to fit the rails *f* upon the beams A, on which it rests.

The inner edges of the beams B are slotted their entire length to receive the tenoned ends of the two beams or shelves E. These latter are free to slide laterally in the carriage-frame, and are held when adjusted by metal spring-clips *c*, of the shape indicated. These clips are bolted to the under sides of the shelves E, and their ends, which are curved, bear against the cross-beams B, as shown in Fig. 2. By means of screws *i*, passed through the clips *c* into the beams E, their tension may be regulated.

Upon each of the shelves E is pivoted eccentrically a cylindrical stud, H. The pivots of these studs pass through the beams E, and have clamping-nuts screwed upon them, in order to hold the studs in whatsoever positions they may be placed.

As seen in the drawing, these studs are located near the front end of the carriage, and in cross-cut sawing they serve as bearings against which to rest the work when the carriage is pushed forward in feeding it to the saws, of which there may be two, three, or four, as desired.

In rip-sawing the carriage may remain stationary, and, after adjusting the shelves E, the studs or cam-bearing guides H are made to bind slightly against the work which is fed between them.

This construction and arrangement of parts permits various adjustments to be made with ease and dispatch to suit the different sorts of work to be sawed.

Having thus fully described our invention, we claim—

1. The sliding rectangular carriage-frame B C, with laterally-adjustable shelves E, clamped in position by spring-clips c, and provided with cam-bearing guides H, substantially as and for the purpose specified.

2. The combination, with the sliding rectangular carriage B C, with laterally-adjustable shelves E and cam-bearing guides H, of the sliding arbor-blocks D, constructed and operated as described, whereby the relative adjust-

ments of the parts can be effected in the manner and for the purpose specified.

Witness our hands this 7th day of May, A. D. 1878.

CHARLES W. SHIBELEY.
EZRA P. WRIGHT.

Witnesses:

J. W. CUMMINGS,
J. S. CHRISTIE.