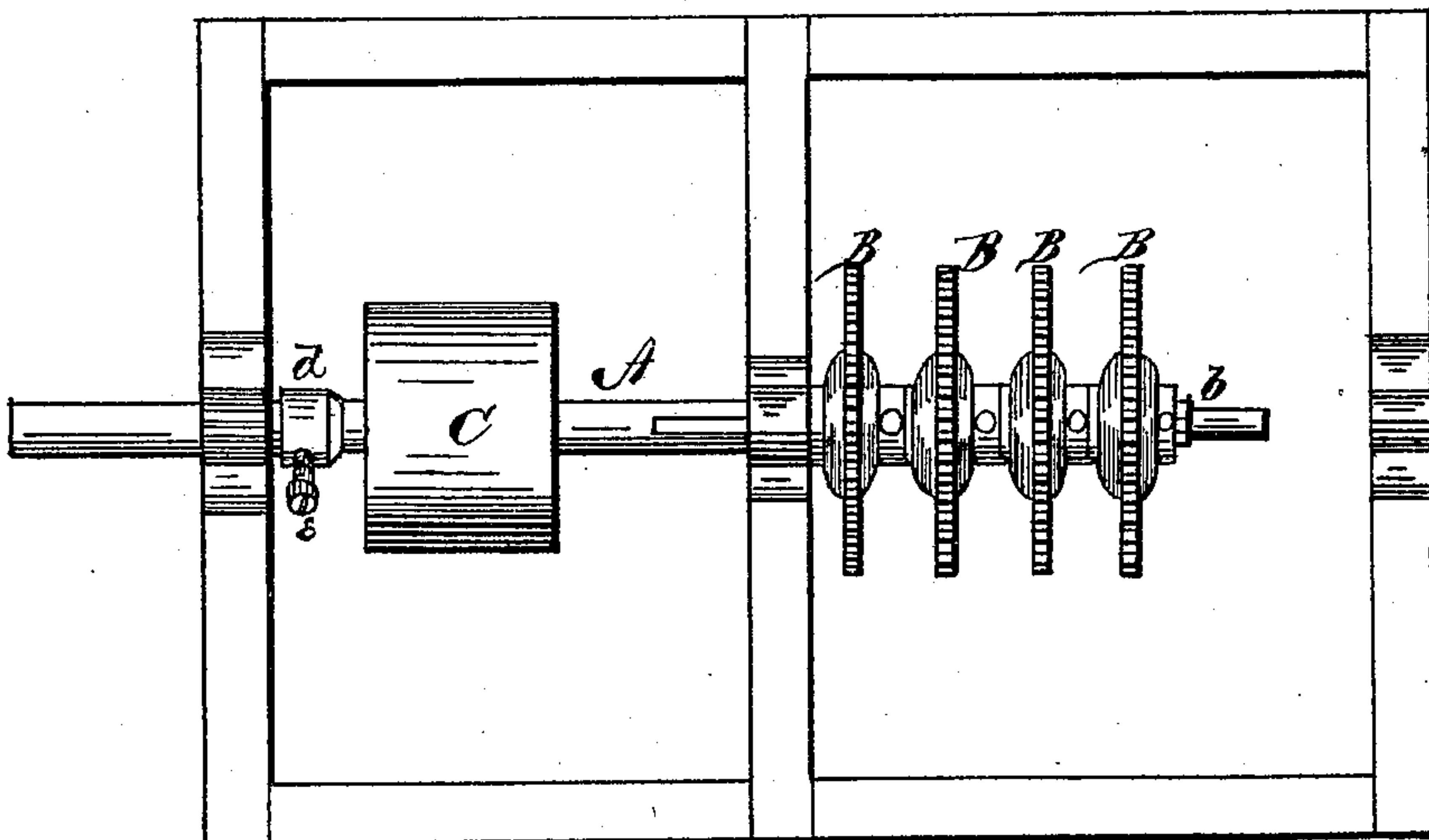
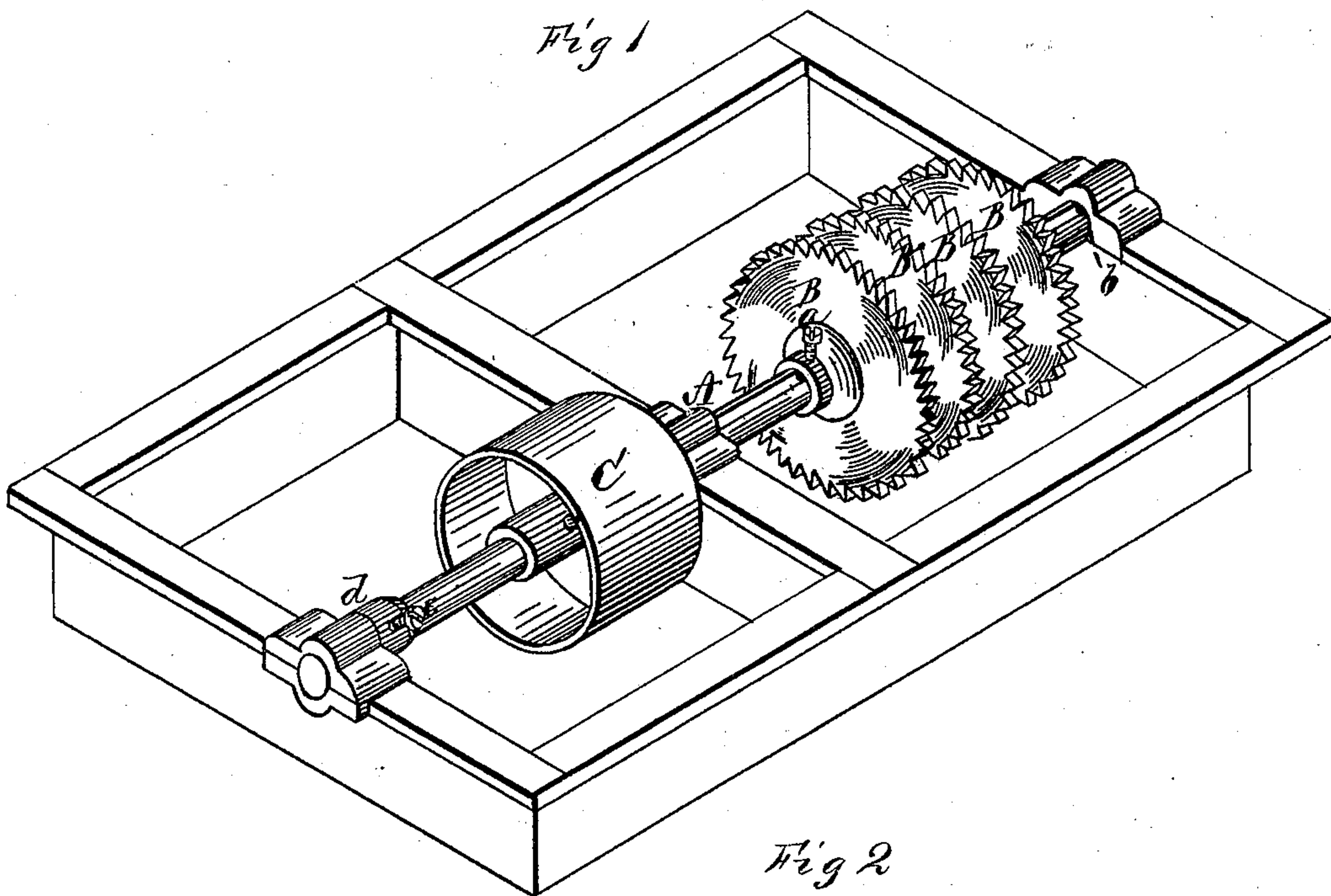


A. T. NICHOLS.
Sawing-Machines.

No. 141,163.

Patented July 22, 1873.



Witnesses:

F. L. Durand
C. L. Ewert

Inventor.

Albert P. Nichols.
per Alexander Mason

Attorneys.

UNITED STATES PATENT OFFICE.

ALBERT T. NICHOLS, OF WILLIAMSPORT, PENNSYLVANIA.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. **141,163**, dated July 22, 1873; application filed May 21, 1873.

To all whom it may concern:

Be it known that I, ALBERT T. NICHOLS, of Williamsport, in the county of Lycoming and in the State of Pennsylvania, have invented certain new and useful Improvements in Sawing-Machine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a saw-arbor for running saws between two bearings, so as to be readily removed and replaced when desired, as will be hereinafter more fully set forth.

In order to enable others 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, referring to the annexed drawing, in which—

Figure 1 is a perspective view, and Fig. 2 a plan view, of my invention.

A represents the saw-arbor, and B B are the saws, attached thereon by means of set-screws *a a*, which enter a longitudinal groove on the shaft. The arbor A is turned perfectly straight from the end that is nearest the pulley C to the bearing on the other end. This bearing is then turned down sufficient to form a shoulder, *b*, of sufficient depth to hold the arbor from working any further that way, and on or near the other end I place a small loose collar, *d*, inside and close to the other or outer bearing, which collar is fastened by a set-screw, *e*, so as to keep the arbor from sliding the other way.

When it is desired to remove one or more of the saws, or add to their number, the collar *d* is loosened by unscrewing the set-screw *e*, when the arbor E may be moved endwise sufficient distance to slip the saws or collars off the other end. These are then taken off and replaced, when the arbor is slid back in place, the collar *d* returned to its place and fastened by the set-screw, and the saws are ready for work again.

The frame must be made enough wider to give the pulley C sufficient room to pass the distance the arbor must slide, so as not to strike the frame; or it may be so constructed as to have the hub on the pulley form the collar and hold the pulley with set-screws.

This arbor is particularly adapted to machines for slitting boards for flooring and roofing laths, battens, or edging both edges of boards at once, where two or more saws are used.

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

The arrangement, with a saw-frame, of the longitudinally-grooved and endwise-movable saw-arbor A, having adjustable saws B B, and provided with a shoulder, *b*, at one end, and an adjustable collar, *d*, and set-screw *e* at the other end, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of May, 1873.

ALBERT T. NICHOLS.

Witnesses:

HENRY W. WATSON,
NELSON RUNKLE.