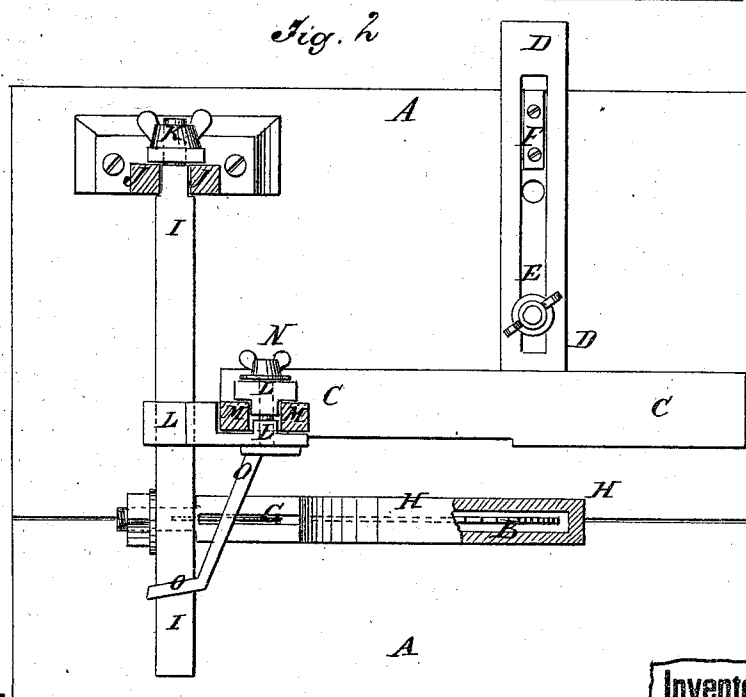
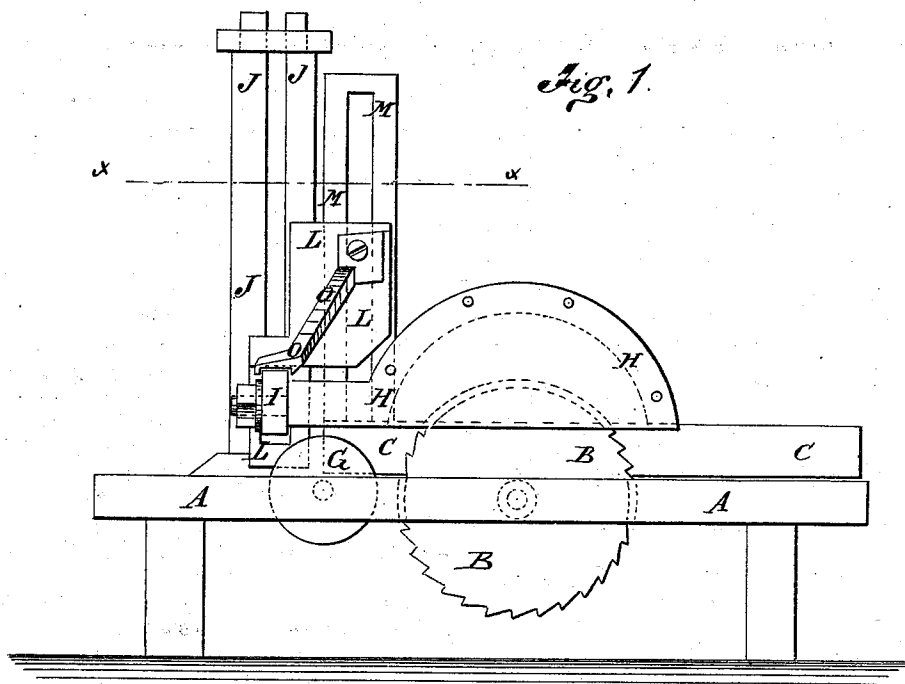


O. A. DEAN.
Circular Sawing-Machines.

No. 149,643.

Patented April 14, 1874.



Witnesses.

Chas. Nida
Perquiss.

Inventor.

O. A. Dean
Per *Munnell*
Attorneys.

UNITED STATES PATENT OFFICE.

OSCAR A. DEAN, OF BETHEL, VERMONT.

IMPROVEMENT IN CIRCULAR-SAWING MACHINES.

Specification forming part of Letters Patent No. **149,643**, dated April 14, 1874; application filed February 14, 1874.

To all whom it may concern:

Be it known that I, OSCAR A. DEAN, of Bethel, in the county of Windsor and State of Vermont, have invented a new and useful Improvement in Circular-Sawing Machines, of which the following is a specification:

Figure 1 is a side view of my improved sawing-machine. Fig. 2 is a top view of the same, partly in section, through the line *x x*, Fig. 1, and part of the saw cap or guard being broken away.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of circular-saw machines, so as to prevent the lumber and slivers from being thrown against the operator, to prevent the operator's hands from being cut while attending the saw, and to prevent the operator from being injured by the saw flying into pieces when running free, and when sawing thin lumber; and is an improvement upon the patent granted to me August 12, 1873, No. 141,702. The invention consists in the combination of the saw cap or guard, its supporting-lever and guide-blocks, the slotted standards, and the hand-nuts with the saw, the table, and the gage; in the combination of the strengthening-arm with the adjustable guide-blocks and the lever that carries the saw cap or guard.

A represents the frame or table of the machine. B represents the circular saw, which is hung and driven in the ordinary way. C is the gage, to the outer side of which is attached a slotted arm, D, through the slot of which passes the clamping-screw E, by which the gage C is secured in place when adjusted. The slot of the arm D also receives a guide pin or block, F, to keep the gage always parallel with the saw, however it may be adjusted. To the table A, in the rear of the saw B, is placed a circular spreader, G, which enters the kerf and opens or spreads the lumber, so that the said lumber may not bear against the sides of the rear part of the saw. H is a cap or guard, which fits over the upper part of the saw, and prevents anything from coming

in contact with the upper part of the saw, and also prevents slivers from being thrown by the saw against the operator. The rear end of the guard H is secured to the lever I, which crosses the rear part of the table A, and the outer end of which passes through the slot of a vertical standard, J, attached to the outer rear part of the said table A, where it is secured in place adjustably by a hand-nut, K. The lever I also passes through a guide-slot in the lower part of one of the blocks L, the inner sides of which are tongued to fit upon the slotted standard M, attached to the rear end of the gage C, where they are secured in place adjustably by a bolt and hand-nut, N. By this construction, by loosening the hand-nuts K N the lever I and cap or guard H may be raised and lowered as the thickness of the lumber may require. To the blocks L is attached an arm, O, the end of which rests upon the end of the lever I to strengthen it, as shown in Figs. 1 and 2. The lever I also serves as a guard to prevent the lumber from being thrown up by the rear part of the saw. The inner side of the rear part of the gage C is cut away, as shown in Fig. 2, so that the lumber may be free to spread upon both sides of the rear part of the saw.

With this construction the saw cap or guard can be adjusted without disturbing the gage, and the gage can be adjusted without disturbing the saw cap or guard.

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

1. The combination of the cap or guard H, the lever I, guide-block L, slotted standards J M, and hand-nuts K N with the saw B, the table A, and the gage C, substantially as herein shown and described.

2. The combination of the arm O with the adjustable guide-blocks L and the lever I, that carries the cap or guard H, substantially as herein shown and described.

OSCAR A. DEAN.

Witnesses:

H. C. TENNENT,
JAS. G. HENRY.