

(No. Model.)

C. J. L. MEYER.
END JOINTER AND TRIMMER.

No. 549,973.

Patented Nov. 19, 1895.

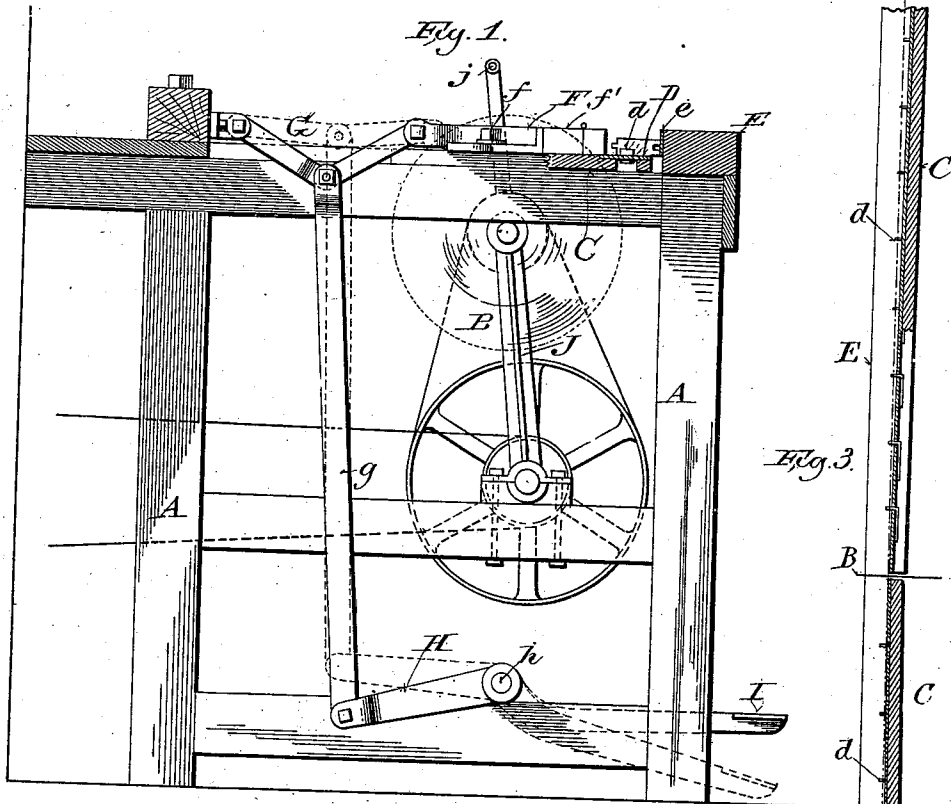
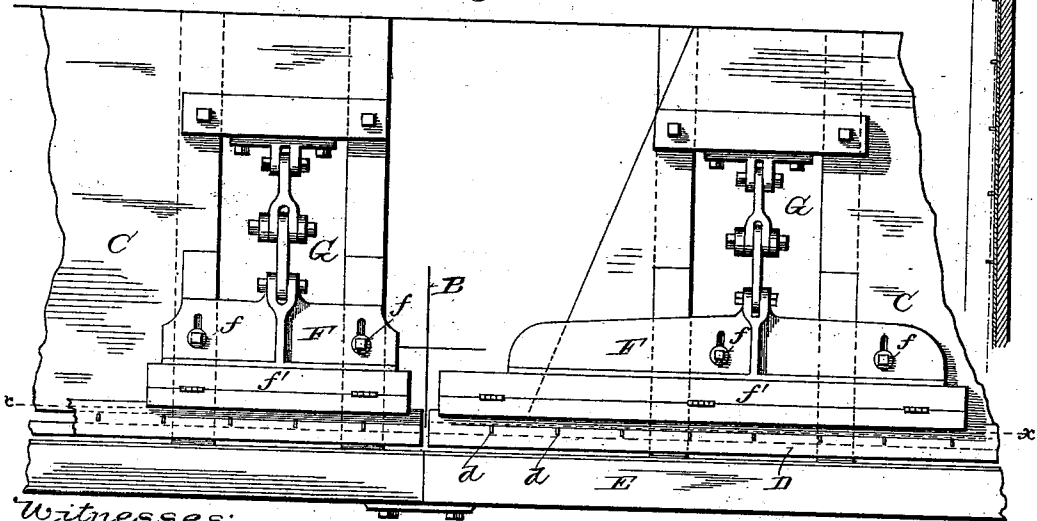


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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END JOINTER AND TRIMMER.

SPECIFICATION forming part of Letters Patent No. 549,973, dated November 19, 1895.

Application filed April 4, 1891. Serial No. 387,713. (No model.)

To all whom it may concern:

Be it known I, CHARLES J. L. MEYER, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in End Jointers and Trimmers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main objects of my invention are to saw flooring or other similar stuff into definite lengths, and to square and joint the ends so that when they are placed together they will form a closed joint on the exposed side.

It consists, essentially, of the combination, with the slashing-saw, of a supporting-table forming an obtuse angle in the plane of the saw, a clamping device for holding the stuff in place to be operated upon, and of certain other peculiarities of construction and arrangement hereinafter particularly described, and pointed out in the claims.

Figure 1 is a vertical cross-section of a machine embodying my improvements. Fig. 2 is a plan view of a portion of the same; and Fig. 3 is a vertical longitudinal section of the work-table or support on the line *x x*, Fig. 2.

A represents the frame of the machine, which may be of the usual or any suitable material and construction.

B represents a crosscut slashing-saw located near the longitudinal center of the machine and movable crosswise of the work-supporting table. It may be carried, as shown, by a swinging frame J, provided with a handle *j*, by which it may be moved by the operator forward and back through a slot in said table; or it may be supported and operated in any other well-known and convenient manner to accomplish the desired purpose.

C represents the table, on which the work is placed in front of and transversely to the saw. It is provided near the front side of the machine with a metallic plate D, let into the same flush with its upper face and provided at certain definite intervals—say of six inches—with yielding gage-stops *d d*, which are formed of strips of metal bent at right

angles, as shown in Fig. 3, attached by their longer arms to the under side of the plate D, with their shorter arms projecting normally a short distance above the upper side of said plate through openings therein.

E represents a rest secured to the front side of the machine and projecting a short distance above the table C. It is faced on the inner vertical side toward the saw with a metal strip *e* to prevent wear and to maintain a straight perfect surface against which to place one edge of the stuff to be jointed. The plate D is severed transversely in the plane of the saw, and the two sections are placed at a slight inclination to each other in planes which intersect each other at an obtuse upwardly-presented angle in the plane of the saw, as shown in Fig. 3.

F F represent clamps mounted upon the table C a little inside of and parallel with the rest E and movable transversely to said rest, so as to be withdrawn for the reception of material and advanced to grasp and hold it firmly in place between them and said rest, to be operated upon by the saw B. These clamps may be secured to the table or frame of the machine by bolts *f f*, passing through transverse slots therein to permit of the required lateral movement thereof. They are preferably formed of cast-iron and provided with facings of wood *f'*. These facings are preferably made of two longitudinal sections hinged together, one of the sections being rigidly attached to the clamp. By this construction the outer hinged section may be turned up and jointed when it becomes worn on its working face or removed and replaced by a new section when it becomes too much worn or injured for rejointing.

Toggle-levers G G connect the clamps F horizontally with supports at or near the rear side of the machine, and are connected by upright rods *g*, pivoted at their upper ends to the joints between the links composing said toggle-levers, with crank-arms H on a horizontal rock-shaft *h* near the base of the machine. To this rock-shaft is secured a forwardly-projecting foot-lever I, as shown in Fig. 1, by means of which the clamps F are operated and the stuff to be jointed is held firmly in place during the operation.

My improved machine operates as follows:

The stuff to be trimmed and jointed is placed upon the table directly over the plate D, provided with the retractile gage-stops *d d*, which are pressed down into said plate by the superposed strip, and is moved lengthwise thereon to bring its outer end into engagement with the nearest stop which will bring the saw-cut at the desired point. The lever I is then depressed and the adjacent clamp F forced against the strip, which is held snugly down against its bed on plate D, thereby clamping and holding it firmly in place against the rest E. The saw is then moved forward by the operator cutting off or severing the strip at right angles to its length and to a slight bevel, which, when two ends correspondingly cut are placed together, forms a perfectly-closed joint on the upper, outer, or exposed side. The stuff is placed on either side of the saw, according to the end which is to be trimmed and jointed. When a knot or defective part is to be removed from a strip, the strip is first placed in the proper position on one section of the plate D and cut, and then placed on the other section of said plate and the knot or defect removed and the remaining portion of the strip trimmed and jointed in like manner. After one end of a strip has been trimmed and jointed it is cut to a definite length in trimming and jointing the other end by means of the graduated stops *d d*.

In trimming, jointing, and cutting matched stuff into certain standard lengths the grooved edge is preferably placed against the guard E, and the ends produced on strips placed at opposite sides of the saw will when placed together form a perfectly-closed joint on one side, the ends being beveled in opposite directions.

I claim—

1. In a trimming and jointing machine, the combination of a movable saw, a work supporting table formed on opposite sides of the saw in two planes which intersect each other at an obtuse angle in the plane of the saw, and provided in the direction of its length on each side of the saw with a series of gage

stops, a rest at right angles to the plane of the saw, and a clamp on each side of the saw, movable transversely to said rest and arranged to hold the stuff in place against it, substantially as and for the purposes set forth.

2. In a trimming and jointing machine, the combination of a cross cut saw movable at right angles to its arbor, a work supporting table provided on one side with a rest at right angles to the saw plane, a clamp movable transversely to said rest, a toggle lever connecting said clamp with a fixed support, and a lever connected with and arranged to operate said toggle lever, substantially as and for the purposes set forth.

3. In a trimming and jointing machine, the combination with the saw, of a work supporting table, a fixed longitudinal rest, a clamp movable transversely thereto and provided with a facing of wood hinged thereto so as to be turned up and re-jointed, and a lever connected with and arranged to move said clamp toward said rest, substantially as and for the purposes set forth.

4. In a trimming and jointing machine, the combination of a saw movable in a direction at right angles to its arbor, a work supporting table set on opposite sides of the saw in planes intersecting each other at an obtuse angle in the plane of the saw, a fixed longitudinal rest at the front side of said table and at right angles to the plane of the saw, clamps, one on each side of the saw, movable transversely to said rest, toggle levers pivoted at one end to said clamps and at the other to the frame of the machine or other fixed support, and a lever connected with and arranged to operate said toggle levers, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

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Witnesses:

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