(No Model.) 2 Sheets—Sheet 2.

P. McCOURT.

CUTTING TOOL FOR DOVETAIL GROOVES.

No. 542,344. Patented July 9, 1895.

Fig. 6.

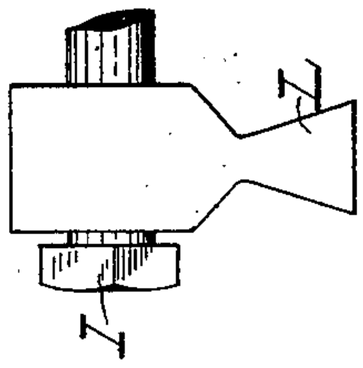


Fig. 7.

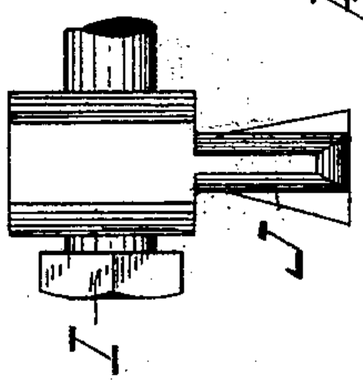


Fig. 8.

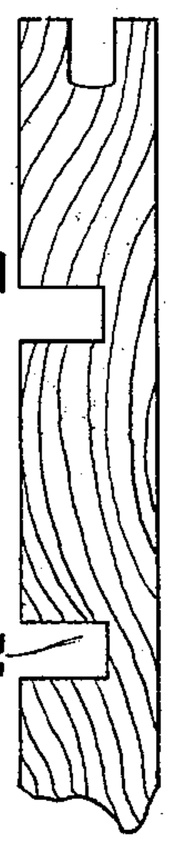


Fig. 9.

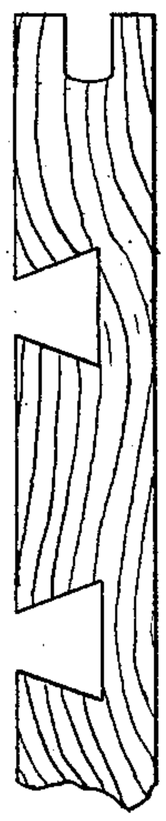


Fig. 3.

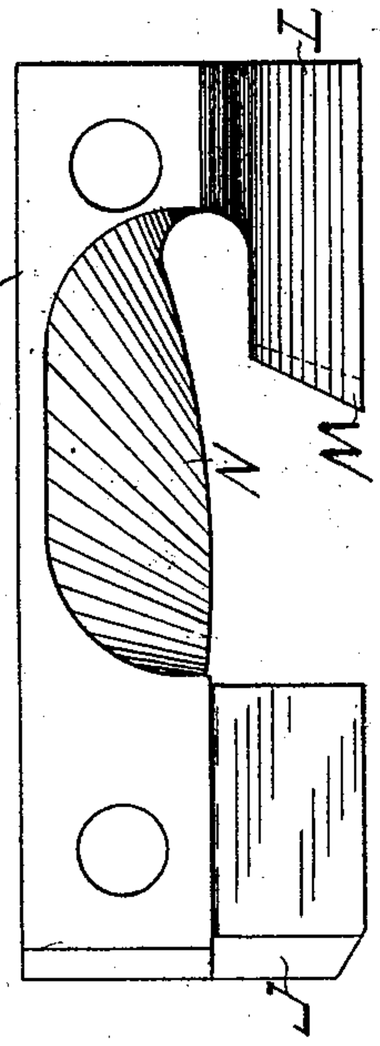


Fig. 4.

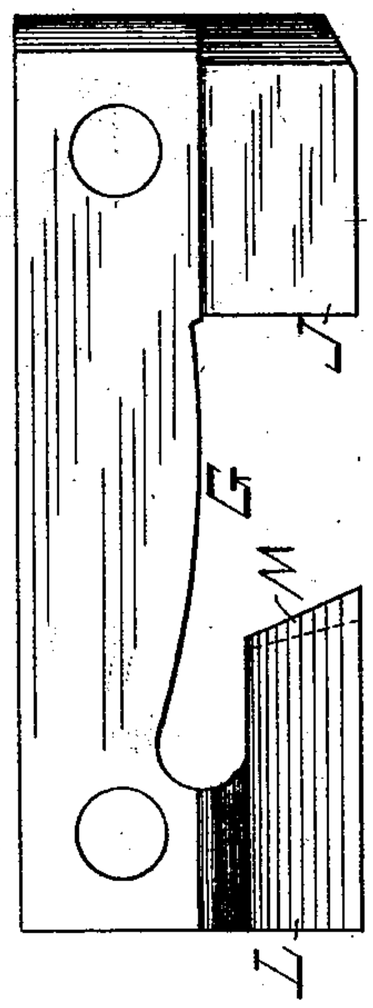
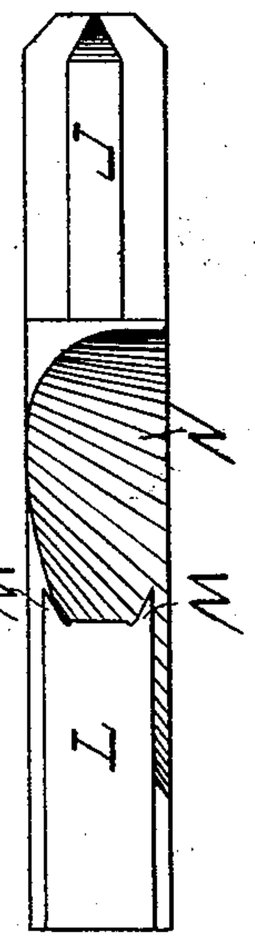


Fig. 5.



Witnesses:
Alex. Scott
V. W. Middleton.

Inventor:
Peter McCourt
By Erwin Wheeler & Wheeler
Attorneys

(No Model.) 2 Sheets—Sheet 1.

P. McCOURT.

CUTTING TOOL FOR DOVETAIL GROOVES.

No. 542,344. Patented July 9, 1895.

Fig. 1.

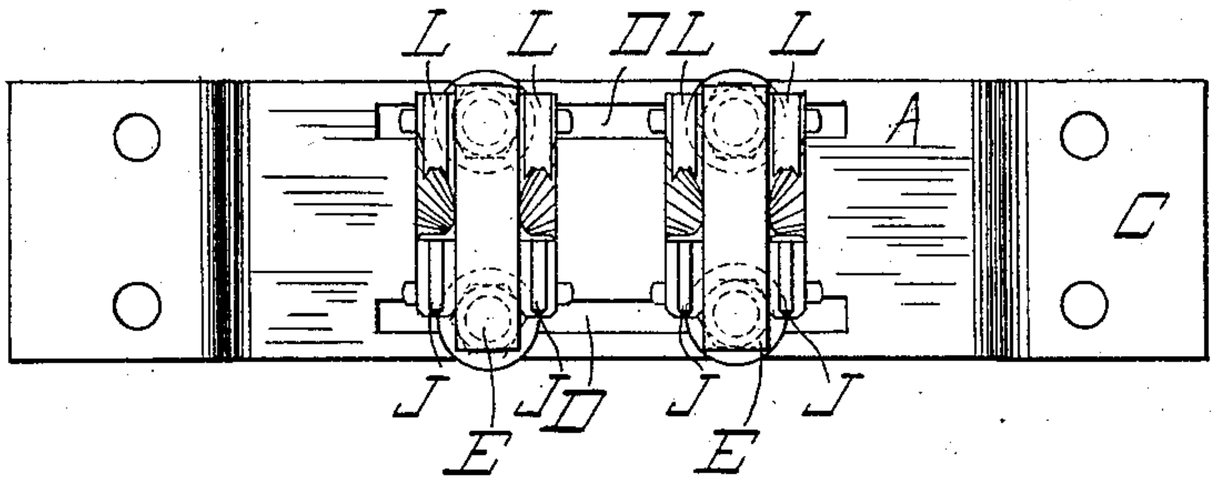
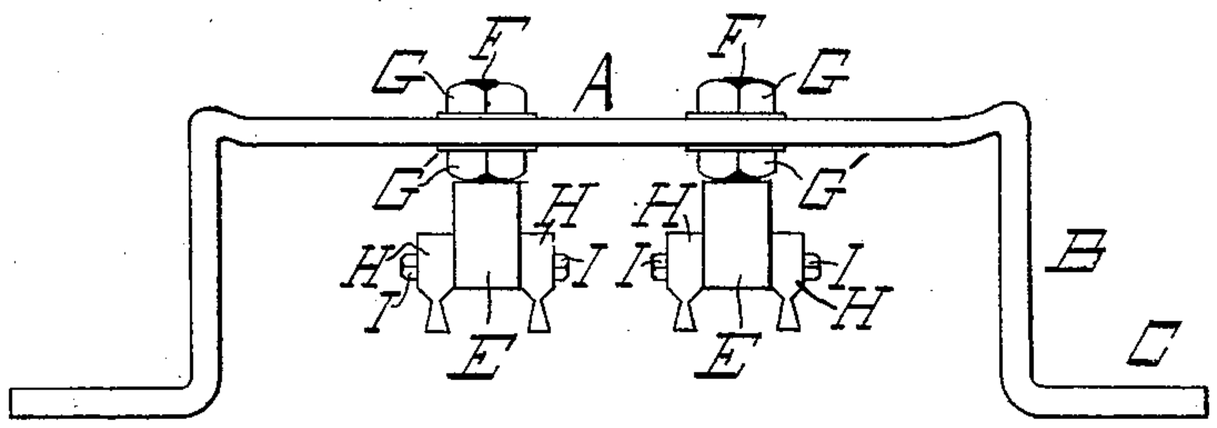


Fig. 2.



Witnesses:
Ferd. C. Otto.
Clara L. Rosch.

Inventor.
Peter McCourt
By Erwin Wheeler & Wheeler
Attorneys.

UNITED STATES PATENT OFFICE.

PETER McCOURT, OF ARPIN, WISCONSIN, ASSIGNOR OF ONE-HALF TO A. L. ARPIN, OF SAME PLACE.

CUTTING-TOOL FOR DOVETAIL GROOVES.

SPECIFICATION forming part of Letters Patent No. 542,344, dated July 9, 1895.

Application filed January 7, 1895. Serial No. 534,111. (No model.)

To all whom it may concern:

Be it known that I, PETER McCOURT, a citizen of the United States, residing at Arpin, in the county of Wood and State of Wisconsin, have invented new and useful Improvements in Cutting-Tools for Forming Dovetail Grooves, of which the following is a specification.

My invention is designed for use in the manufacture of combined sheathing and lathing, consisting of sheathing-boards provided with longitudinal dovetail grooves, in which the plaster is clinched.

It relates to improvements in cutting-tools for forming the dovetail grooves and pertains especially, first, to the combination in a single tool of a series of knives or cutters whereby all the grooves in a sheathing-board may be simultaneously formed, and, second, to the peculiar form of the individual cutters hereinafter described.

The object of my invention is to provide a tool for cutting out the sides of ordinary grooves previously formed to form the required dovetail grooves.

In the drawings, Figure 1 is a plan view of the bottom or sole of my cutting-tool, as it is composed of a series or gang of four cutters secured in a frame which is adapted to be attached to the bed of the planer. Fig. 2 is a side view of the same, showing the front ends of the cutters. Figs. 3 and 4 are right and left side views, respectively, of one of the cutters. Fig. 5 is a view of the sole of the cutter, showing the laterally-diverging points of the cutting-edges. Fig. 6 is a view of the rear end, showing the dovetail form of the stock. Fig. 7 is a view of the front end, showing the guide. Fig. 8 is an end view of a portion of one of the sheathing-boards, showing a common form of groove as it is made preparatory to being acted upon by my cutting-tool. Fig. 9 is a similar view of the board shown in Fig. 8 after being operated upon by my cutting-tool.

Like parts are referred to throughout by the same reference-letters.

The frame of my cutting-tool is formed with the horizontal tool-supporting portion or plate A, the upright standards B, and the bed-plates C, all of which may be formed integrally from a single plate of metal bent into the required shape, as shown in Figs. 1 and 2.

The plate A is provided with slots D, and the cutter-supporting blocks E are bolted to the under side of the plate by means of the bolts F, which are secured to the blocks and pass upward through the slots, being provided with the nuts G G′ above and below the plate A, respectively, for the purpose of adjustment. In Fig. 1 I have shown two of these blocks E adapted to support a gang of four cutters, one of the cutters being bolted on each side of each block and the blocks being made to correspond in thickness with the distance between the grooves in the material used.

The cutters are formed independently and are provided with stock H, through which the securing-bolt I passes for attaching them to the blocks E. On the under side of the stock, near the front end, I have formed the guide J, adapted to fit into the groove K of the material. (Shown in Fig. 8.)

The cutting portion L is formed on the rear end of the stock H with diverging sides, as shown in Fig. 6. The front end of the portion L slants forward and downward to the sole and the central portion of this end is recessed or channeled, the sides of the recess being slanted outward to form the beveled or cutting edges M M. The forward slant of the recess also forms a somewhat blunt edge with the sole of the cutter, which facilitates the release of the shaving or strip which is cut out of the material and prevents splintering. Considerable space is left between these cutting-edges and the guide J to prevent clogging, and above the cutting-edges the stock is provided with a lateral recess N, through which the waste is discharged.

The portion G is attached to the stock by a narrow neck, near the rear end thereof, and the stock, guide, and cutting portion are formed integrally.

The cutters being attached to the blocks E, the frame is bolted to the bed of the planer and the boards are forced through, with the cutters fitting into the grooves. The guides J prevent any lateral movement of the board, and, there being as many cutters as there are grooves in the board, a single passage of the latter completes all of the grooves simultane-

ously. The bolts in the plate A permit of a lateral adjustment of the blocks, and by providing blocks with various thicknesses it is obvious that the cutters can be readily separated to correspond to the distance between the grooves in different classes of work, and the number of cutters can be increased or reduced at pleasure.

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

1. A cutting tool for forming dove tail grooves, consisting of the cutting portion L having divergent sides and with its front end slanted forward and downwardly to form a cutting edge at the sole, and recessed inwardly to form the lateral cutting edges M. M. in combination with the stock H formed integrally with the portion L. and provided with a lateral recess N above the cutting edges and the guide J. supported in front of the portion L. with an open space between it and the cutting edges, substantially as described.

2. A cutting tool for forming dove-tail grooves, consisting of the combination with the supporting frame plate, provided with the adjusting slots D, the cutter supporting blocks E secured to said frame by bolts passing through said slots and one or more cutters having a stock H adapted to be adjustably secured to said blocks, and provided with the lateral recess N, the guide J, and cutting edges M, M, substantially as described.

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

PETER McCOURT.

Witnesses:
JOHN F. COLE,
MATTIE E. ARMSTONG.