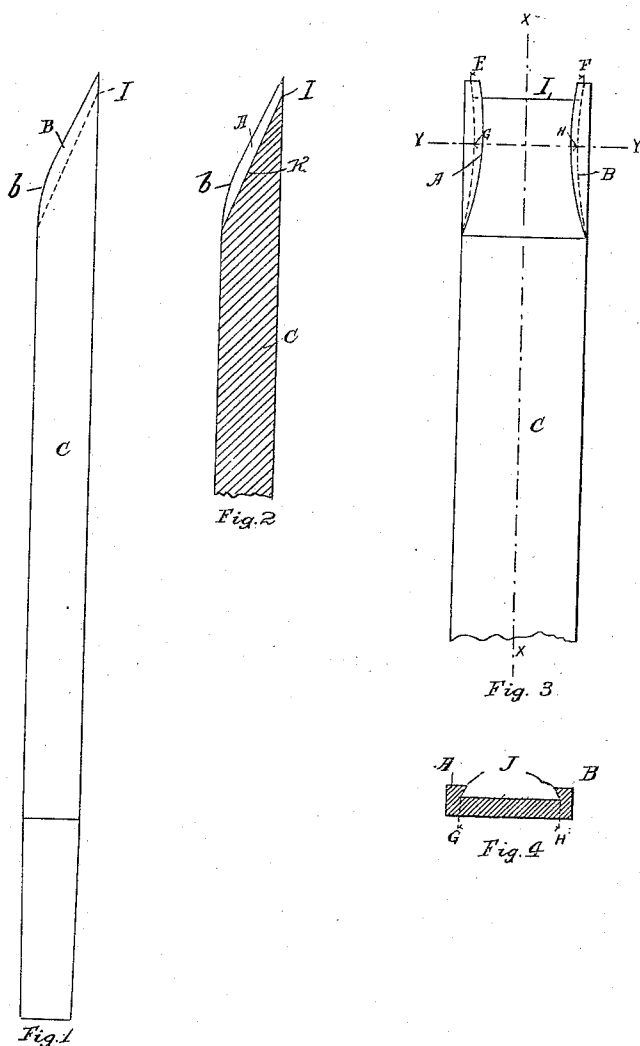


(No Model.)

F. E. VIGER.
CHISEL FOR MORTISING MACHINES.

No. 469,360.

Patented Feb. 23, 1892.



Witnesses:

F. X. Malo

Alp. Waller

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UNITED STATES PATENT OFFICE.

FRANÇOIS E. VIGER, OF LONGUEUIL, CANADA.

CHISEL FOR MORTISING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 469,360, dated February 23, 1892.

Application filed July 9, 1891. Serial No. 398,968. (No model.)

To all whom it may concern:

Be it known that I, FRANÇOIS EUSÈBE VIGER, a citizen of the Dominion of Canada, residing at the town of Longueuil, in the county of Chambly and Province of Quebec, Canada, have invented certain new and useful Improvements in Chisels for Mortising-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to chisels for mortising-machines, whereby the shavings are automatically thrown out, this being accomplished by two projections, one placed on each side of the bevel cutting-edge of the ordinary chisels, as shall be shown hereinafter.

My invention has for its object to provide chisels for mortising-machines which will greatly augment their capacity.

Referring to the drawings, similar letters refer to similar parts throughout the several views.

Figure 1 is a side elevation; Fig. 2, a section through line X X of Fig. 3; Fig. 3, a front view, and Fig. 4 a section on line Y Y.

My invention simply consists in the convex projections A and B, which form one piece with chisel C. As can be seen in cross-section in Fig. 4, they form a dovetail recess on the bevel K of the cutting-edge I, and the distance E F is somewhat longer than the one G H, so that a shaving being cut out by the cutting-edge I is held in the dovetail J, formed by the projections A B and the bevel-edge K, and as it is forced down the chip or shaving is forced up through the dovetail recess J, and, as the distance G H is smaller than the one E F, the moment it has passed this point G H it cannot fall back again through where it has passed, and as this dovetail passage J widens

out, as shown in Fig. 3, once past the point G H the chip or shaving passes out with ease, and, as it cannot return, it is thrown out each time the chisel comes down, for the new chip or shaving formed forces the one held in the dovetail J out.

The side portions of the recess formed by the projections A and B are convex at their bottoms, where they join onto the beveled portion K, as well as at their tops, as may be seen by the dotted lines in Fig. 3. This construction enables the chisel to seize the chips firmly and permits the rear corners *b* to be rounded off, which is advantageous in starting a hole and also decreases the liability of the projections to be broken off and enables a very shallow recess to be used effectively. This is of a great advantage on the plain chisels now in use, for they merely cut out the shaving and it falls back into the mortise, thereby necessitating its cleaning out, which always consumes a certain amount of time. The points G H may be at any convenient distance from the one E F.

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

A chisel for a mortising-machine, provided with projections A B, having flat outer and convex inner sides forming a dovetailed recess narrower at the middle than at the ends, said sides being convex at their tops and also at their bottoms, where they join onto the beveled portion K of the chisel, and having their rear corners *b* rounded off, substantially as described and shown.

In testimony whereof I have affixed my signature in presence of two witnesses.

F. E. VIGER.

Witnesses:

J. D. DUCHARNE,
F. X. MALO.