

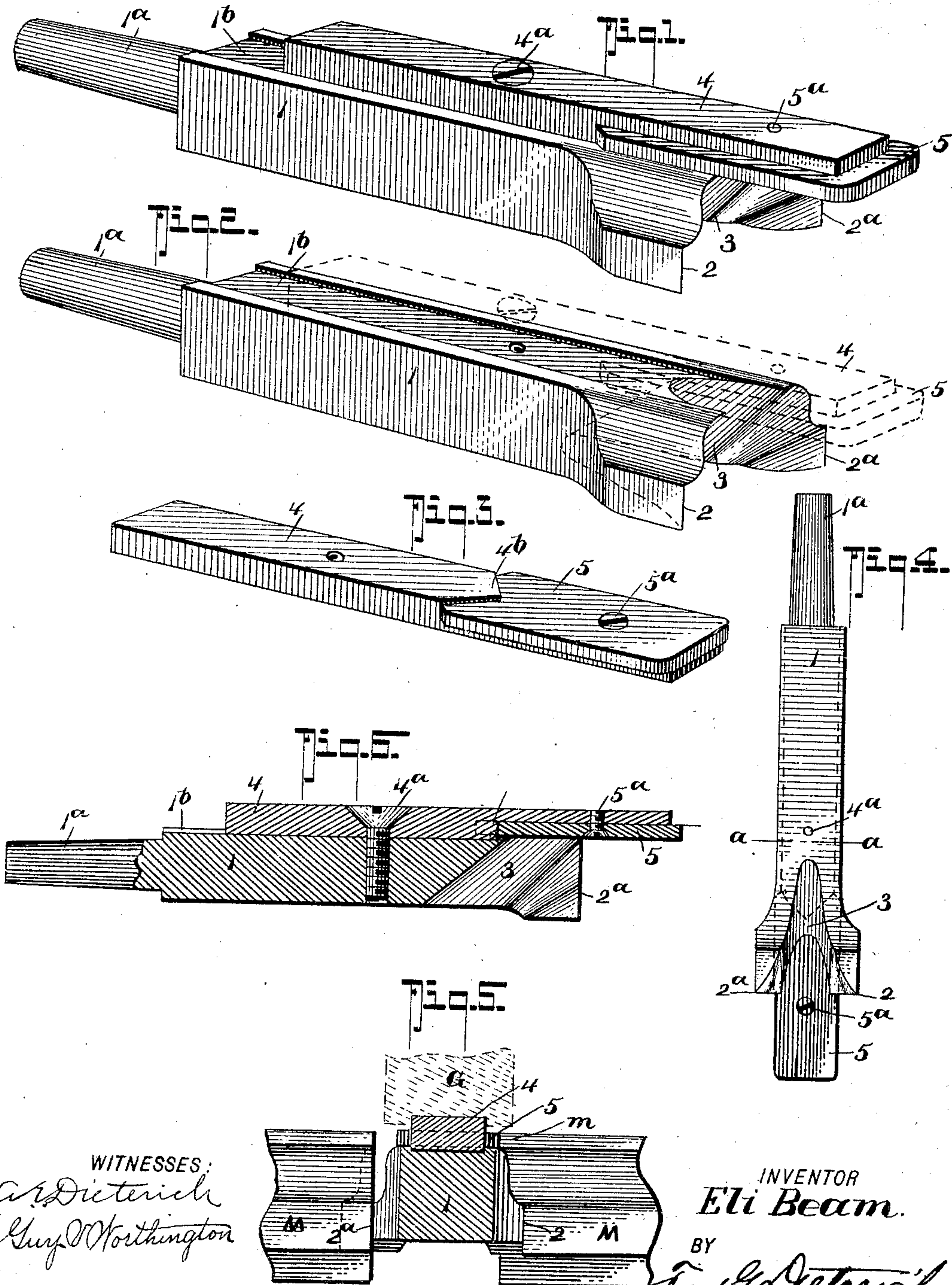
No. 695,783.

Patented Mar. 18, 1902.

E. BEAM.
COPING TOOL OR CHISEL.

(Application filed Apr. 4, 1901.)

(No Model.)



WITNESSES:
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ELI BEAM, OF VANCOUVER, CANADA.

COPING TOOL OR CHISEL.

SPECIFICATION forming part of Letters Patent No. 695,783, dated March 18, 1902.

Application filed April 4, 1901. Serial No. 54,338. (No model.)

To all whom it may concern:

Be it known that I, ELI BEAM, a citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Coping Tools or Chisels, of which the following is a specification.

My invention relates to improvements in wood-cutting tools for cutting the ends of moldings to form their junction, as in window-sashes and such like, and is designed for use in a light mortising or similar machine. It is designed to provide cutting edges of the desired contour of molding, both right and left hand, on one tool, which will be held up to its work against the tendency to spring away under the strain of cutting. I provide also a depth-gage to prevent the piece of molding being cut beyond the desired limit. I attain these objects by the particular construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the tool from the back. Fig. 2 is a similar view of the tool proper with the guide and gage removed. Fig. 3 is a perspective view of the guide and gage so removed, but inverted, so as to show the face which goes against the tool. Fig. 4 is a front elevation of the tool. Fig. 5 is a sectional plan on the line *aa* in Fig. 4, showing the application of the tool to the desired work. Fig. 6 is a longitudinal section of my improved coping-tool.

The tool proper, 1, consists, essentially, of a double chisel having the cutting edges 2 and 2^a on either side, and the clearance 3 for the chips either forged or milled out between them. The contour of these cutting edges is to the cross-section of the molding it is desired to cut to, one side cutting the right-hand and the other the left-hand side.

1^a is a taper shank integral with the tool 1 and adapted to fit the tool-socket of a light mortising-machine.

I have preferably shown the tool as made of square steel, so as to facilitate the attachment thereto of the guide-piece 4 and gage-piece 5.

The guide-piece 4 is of elongated rectangular form adapted to slide in a vertical recess in the frame of the mortising-machine, and at the lower end of it, on the side which lies next

to the tool 1, is a shallow recess to receive the gage-piece 5. The upper end of the recess is formed with a downwardly-projecting V 4^b, which engages a similarly-shaped end on the gage-piece 5, and this piece 5 is attached to 4 at the lower end by a countersunk screw 5^a. A shallow recess 1^b in the tool 1 is of a width to receive the guide-piece 4, and one countersunk screw 4^a holds it steady and secure therein. As will be seen by reference to Fig. 1, the gage-piece when attached projects downwardly below the cutting edges of the tool and is supported by the guide-piece 4. This mode of fastening 5 to 4 enables the gage-piece to be readily changed, for by the removal of the screw 5^a, which is easily accessible from the space 3, the piece 5 may be disengaged from the V-shaped end, which serves to steady and secure the upper end.

A reference to Fig. 5 will show the manner in which the tool is applied. M represents pieces of molding the ends of which are to be cut to fit onto the same section of molding, and G the guide on the machine in which the tool is steadied to its work by the guide-piece 4. It will be seen that when the corner *m* contacts with the gage-piece 5 the required depth is cut.

Having now particularly described my device, what I claim as new, and desire to be protected in by Letters Patent, is—

1. A tool of the class described having two cutting edges adapted to cut, exterior to the tool, the ends of a desired molding in right and left hand contour; a clearance-space between such cutting edges and in combination a taper shank, integral with the tool, to fit the tool-socket of a suitable machine, all substantially as described.

2. In a tool of the class described having double exterior cutting edges and a space between; a guide-piece removably attached to the back of the tool and designed to slide in a vertical groove in the frame of the machine; and a stem integral with the tool whereby it is connected with the tool-socket of an ordinary mortising or similar machine, specifically as and for the purpose specified.

3. In a tool of the class described, having two cutting edges adapted to cut the right and left hand contour of the desired molding; the guide-piece 4 attached to the body of the tool

and adapted to slide in a corresponding guide on the machine, and the gage-piece 5 removably secured to 4, designed to stop the progress of the cutting when the required depth 5 has been attained, substantially as specified.

4. In a tool of the kind and for the purpose described in combination; the body of the tool having a shallow recess; a guide-piece to fit in the recess and to be secured therein with 10 a countersunk screw; a gage-piece sunk below the flush on the tool side of the guide-piece; a V-shaped end to the guide-piece re-

cess; a corresponding end in the guide-piece, and a countersunk screw which shall secure the gage-piece to the guide-piece, substantially as and for the purposes specified. 15

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

ELI BEAM.

In presence of—

ROWLAND BRITAIN,
ELLICE WEBBER.