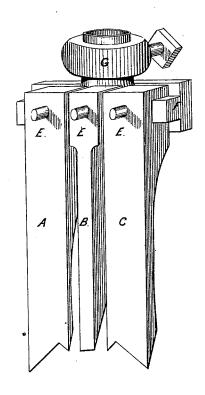
W. KING. Chisel.

No. 204,439.

Patented June 4, 1878.



Witnesses It Straddau Ly Silvester

UNITED STATES PATENT OFFICE.

WILLIAM KING, OF LONDON, ENGLAND, ASSIGNOR TO HENRY HALL, OF SAME PLACE.

IMPROVEMENT IN CHISELS.

Specification forming part of Letters Patent No. 204,439, dated June 4, 1878; application filed April 3, 1878.

To all whom it may concern:

Be it known that I, WILLIAM KING, of 67 Strand, in the city of London and Kingdom of Great Britain, have invented a new and useful Improvement in Tools for Cutting Tenons, which improvement is fully set forth in the following specification, reference being had

to the accompanying drawings.

The improvements consist in the construction and use, for the purposes of cutting tenons and other like purposes, of three cutters, a center and two lateral ones, the side cutters being adjustable to the size of the work required, and the center cutter removable, so that a single tenon can be cut as well as a double, shaping the inner side of the lateral cutters so that their inner sides may be shorter than their outer, and so that their cutting-edges shall be at an angle of thirty degrees, more or less, to the vertical of the tool when in position, said edge being flat on the face of the tool and beveled on the back side; lastly, in combination with the above arrangement of tools, the turning up or grooving the inner edges and points of the lateral tools, to prevent their tendency to spread and so neutralizing the pressure on the outside cutters.

The cutters can be of metal, preferably steel, fixed to a metal frame or block, and have mortises or other convenient contrivance therein, in and by which the tools can be received and held, and by means of set-screws or other fasteners they can be maintained in various positions, as desired. The block is to be furnished with a socket, and can be placed and used in any ordinary mortising-machine.

The drawing hereunto annexed will serve to show a practical mode of carrying out my invention.

A B C are the three cutters placed on a frame bar or block, F, on which they can be slid or adjusted, and fixed, when in adjustment, by the set-screws E E E. Passing through the tools and mortises in the frame F G is the socket with a screw attachment, by means of which it and the frame F is fixed to the plunger of an ordinary mortising-machine.

The drawing shows the faces of the tools; the backs are beveled so that the inner sides

are thicker than the outer.

For cutting one shoulder of a tenon shorter than the other, gages or distance-pieces of the thickness necessary are used, placed between the frame and one of the lateral cutters, so that one side cutter stands out from the plane of the other the distance required, and is operated at that distance, being clamped in position on and by the screw E, which is made long enough for the purpose.

I claim as my invention—

The combination, in tools for cutting tenons, of three cutters adjustable to the size and nature of the work, and shaped, all substantially as described, and for the purposes set forth.

WILLIAM KING.

Witnesses:

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