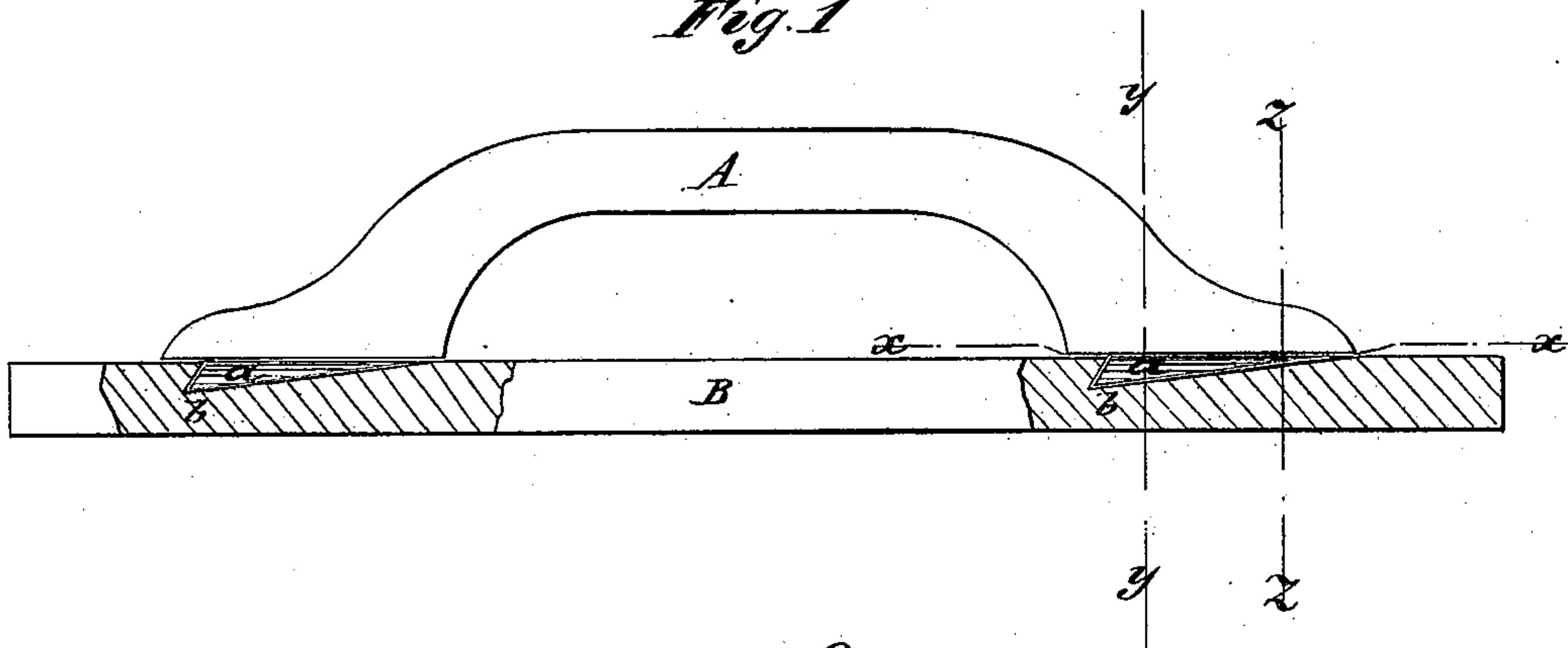


J. WADDELL.  
BRUSH.

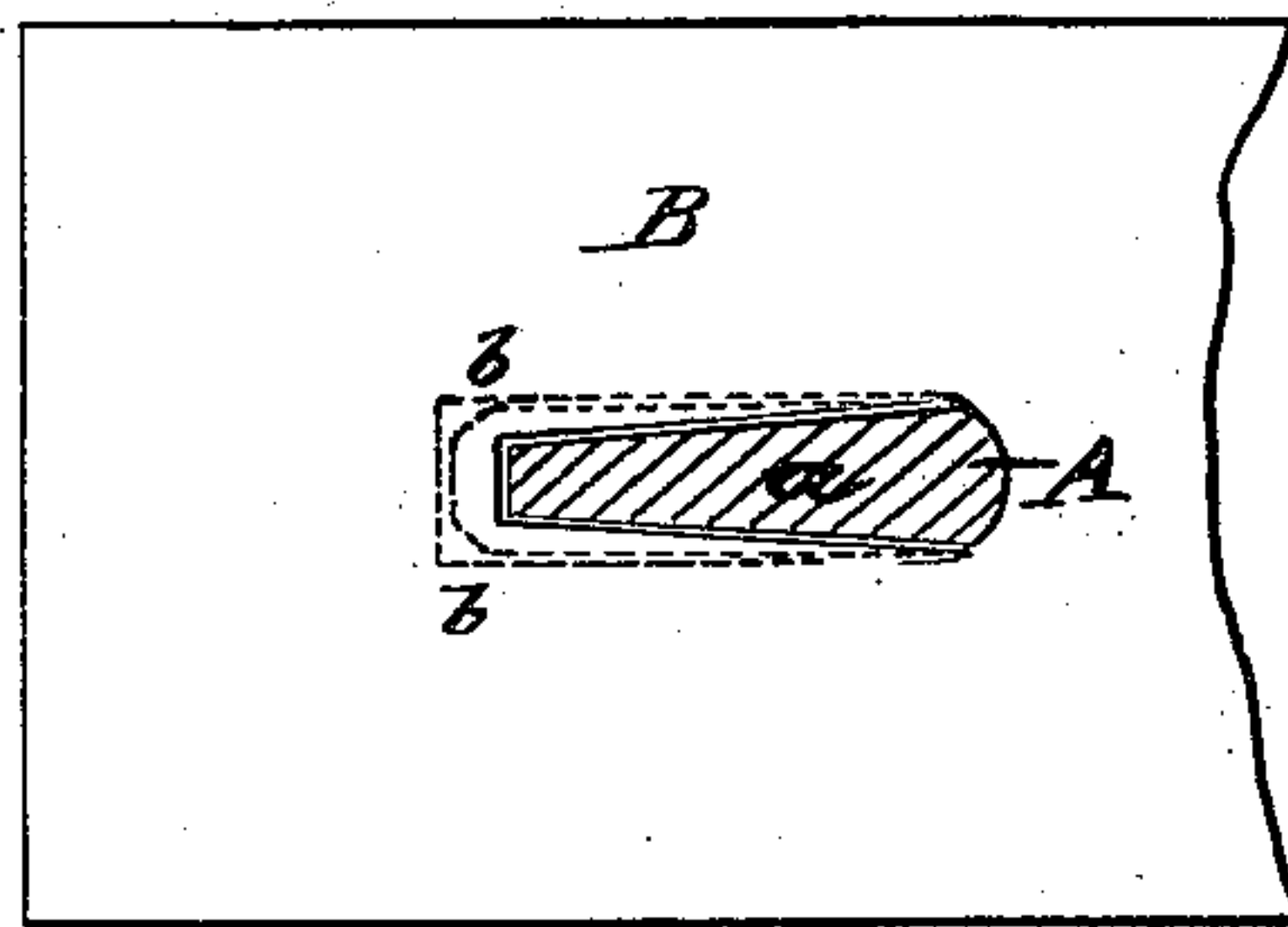
No. 191,388.

Patented May 29, 1877.

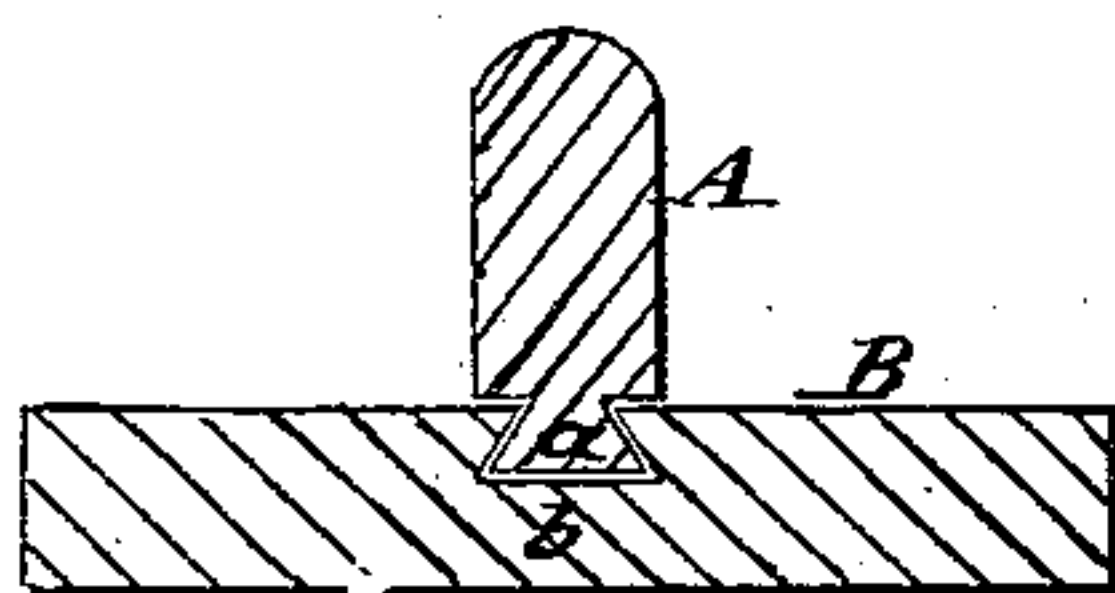
*Fig. 1*



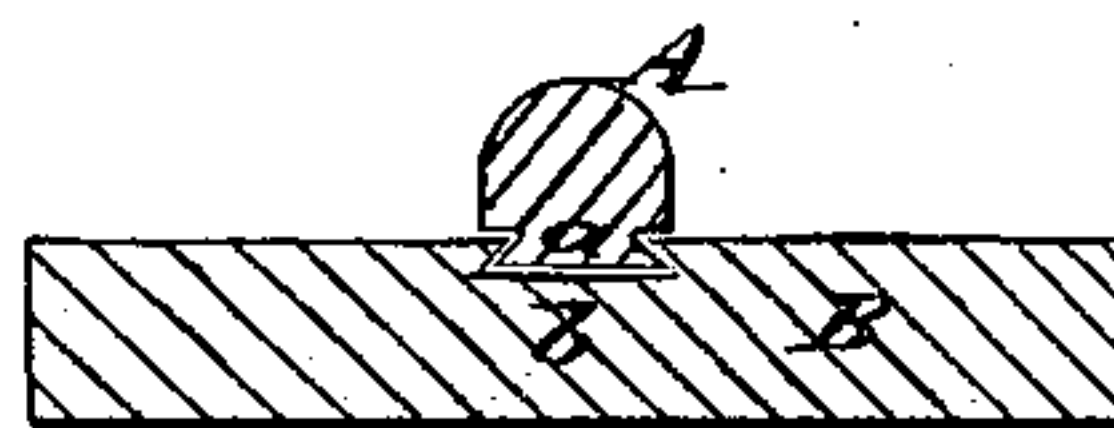
*Fig. 2*



*Fig. 3*



*Fig. 4*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN WADDELL, OF ELORA, ONTARIO, CANADA.

## IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. 191,388, dated May 29, 1877; application filed April 16, 1877.

*To all whom it may concern:*

Be it known that I, JOHN WADDELL, of Elora, in the Province of Ontario and Dominion of Canada, have invented a new and useful Improvement in Fastening Brush-Handles, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of a brush head and handle, showing connection of the same. Fig. 2 is a horizontal section on line *x x* of Fig. 1, and Figs. 3 and 4 are vertical transverse sections of the same on line *y y* and *z z* of Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide an improved mode of fastening brush-handles to the heads of brushes without the use of nails and screws, which have the disadvantage that they pass into one of the bristle-holes of the brush, or near the same, and soon work loose after the brush has been in use for some time.

By my method the handles can be attached in better, stronger, and quicker manner, and with considerable saving, as the screws and nails are dispensed with.

The invention consists of beveled and dovetailed tenons at the ends of the brush-handles in connection with bevel dovetail mortises in the head of the brush.

In the drawing, A represents a brush-handle, which is connected by means of bevel dovetail tenons *a* at the ends of the handle to the brush-head B, said tenons running in one direction, so as to enter simultaneously corresponding mortises *b* of the bevel dovetail shape of the brush-head B, into which the tenons are secured by glue.

The tenons and mortises form a strong and rigid connection between brush-handle and head, as shown in Fig. 1, without the use of any other fastening, the tenons being readily slipped into the mortises of the head of the brush and secured therein without danger of working loose or getting shaky, as the brush-handles that are screwed or nailed on the heads, the handles being thus applied in quicker, cheaper, and stronger manner.

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

A brush-handle attached to its head at each end by a tenon and groove of a bevel, wedge, or inclined shape, whereby a close joint is formed to prevent the play and loosening of the connected parts.

JOHN WADDELL.

Witnesses:

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J. B. C. CROZIER.