

(No Model.)

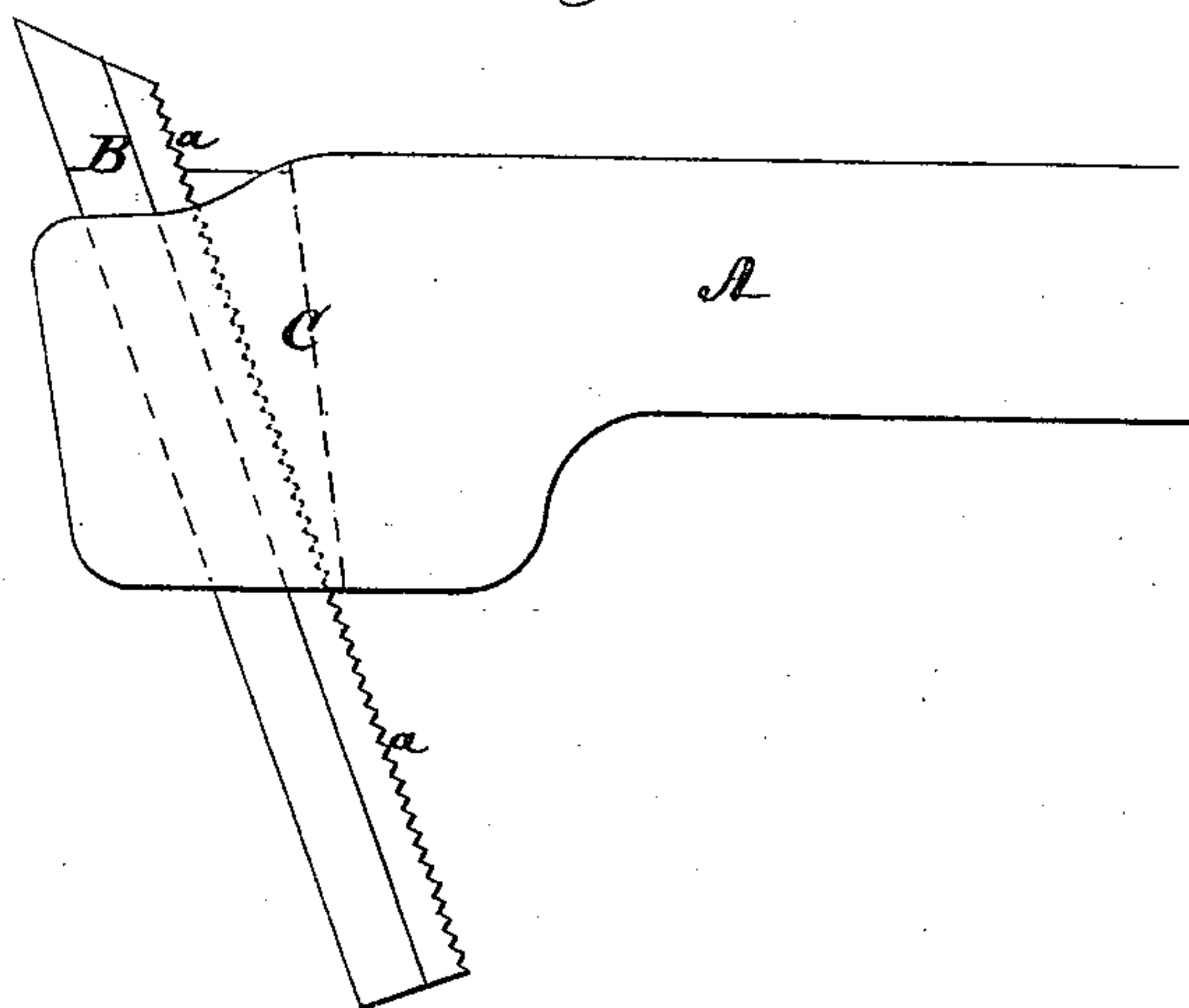
J. F. ALLEN.

CUTTER HOLDER.

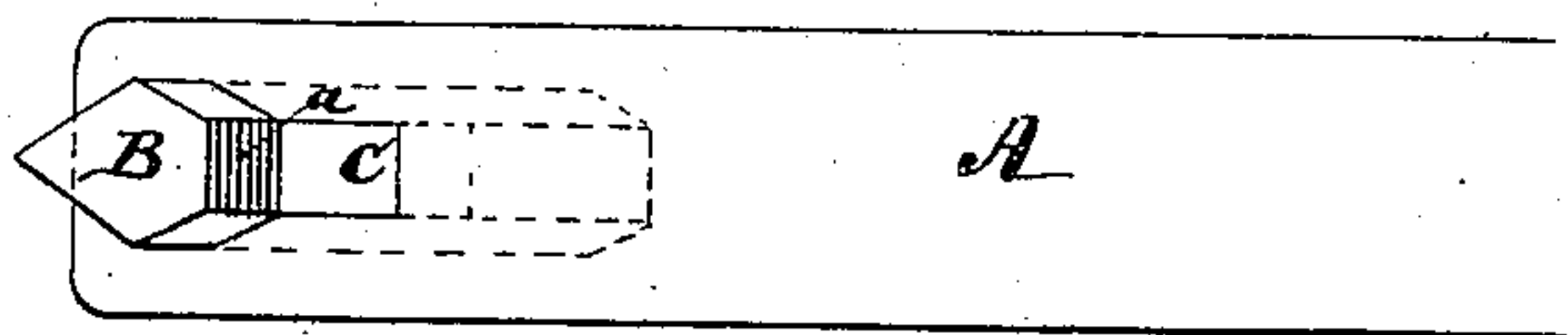
No. 267,477.

Patented Nov. 14, 1882.

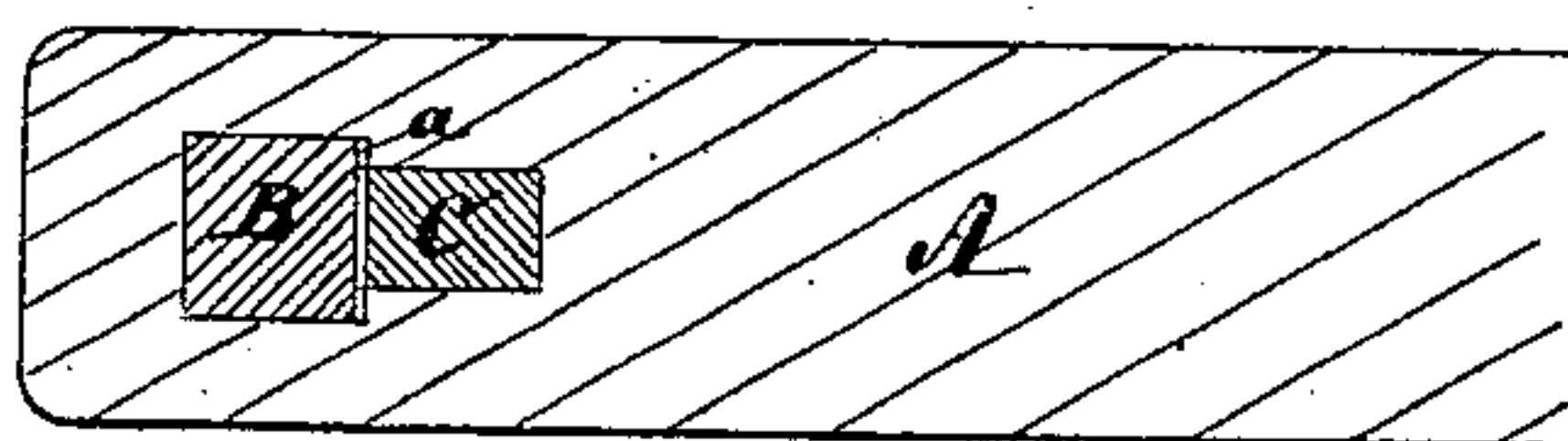
*Fig. I.*



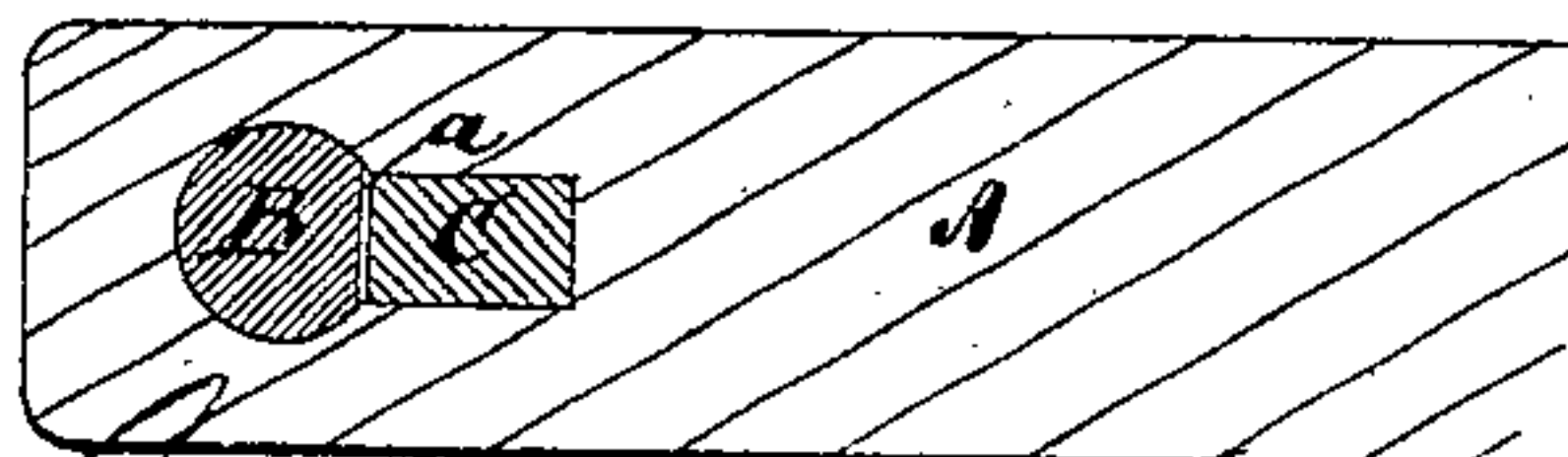
*Fig. II.*



*Fig. III.*



*Fig. IV.*



Witnesses.

*Richard F. Stagle*

Inventor.

*John F. Allen*  
*per Henry E. Rander*  
*attorney.*

# UNITED STATES PATENT OFFICE.

JOHN F. ALLEN, OF BROOKLYN, NEW YORK.

## CUTTER-HOLDER.

SPECIFICATION forming part of Letters Patent No. 267,477, dated November 14, 1882.

Application filed June 12, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. ALLEN, a citizen of the United States, residing at Brooklyn, in the State of New York, have invented a new and useful Tool-Holder, of which the following is a specification.

My invention relates to the device for holding an independent cutting-tool in a holder, and aims at the utmost simplicity of structure.

The invention consists in combining with the shank or holder fitted to receive the cutting-tool in a central opening the cutting-tool and a wedge fitting by means of corresponding irregular surfaces into each other, so as to prevent the movement of the tool and perfectly secure and fasten the same through the wedge into the holder.

In the accompanying drawings, Figure I represents a side view of a tool-holder with cutter attached embodying my invention. Fig. II is a plan or top view of the same. Fig. III represents a square cutting-tool arranged square into the holder, and Fig. IV shows the arrangement of a round tool into the holder.

Similar letters represent similar parts in all the figures.

A is the tool-holder, of proper size to fit a tool-post. B is the cutting-tool, made of suitable steel, which needs only to be ground properly at the point in the proper form for the desired use. A hole or mortise, in form corresponding with the cutting-tool, is cut through the holder A at any preferred angle with the axis of the holder. Behind this hole or mortise for the cutting-tool a wedge-shaped hole or mortise is provided in the tool-holder narrower than the hole for the cutting-tool, into which a wedge, C, is fitted.

When the cutting-tool is put into the tool-holder with the corners in a line with the holder, as shown in Figs. I and II, or when a round cutting-tool is used, as shown in Fig. IV, the back of the cutting-tool B must be

made straight for a width corresponding with the width of the wedge C. The cutting-tool B being inserted into the tool-holder projecting the proper distance above its top surface, and the wedge C being then driven home, the frictions between the surface on the back of the cutting-tool and the face of the wedge will for light work, and when the depth of the head of the tool-holder is of any considerable size, be generally sufficient to hold the cutting-tool perfectly firm.

For greater security I provide the rear side of the cutting-tool B with notches or regular teeth *a*, and the face of the wedge C with corresponding notches or teeth, which will interlock with those in the cutter and prevent any longitudinal movement.

To disengage the cutting-tool from the holder, a slight blow against the under side of the cutting-tool will start the same and the wedge C upward, when the cutter and wedge can easily be removed.

I am aware that a clamping-piece secured by means of a bolt has been arranged at the back of the cutter and interlocked with the same by means of notches or teeth; but by my invention I dispense with all bolts or pins for the purpose of fastening either the tool or clamping-piece, and obtain thereby the utmost simplicity of structure not surpassed by any other device.

What I claim as my invention, and desire to secure by Letters Patent, is—

A shank or tool-holder, A, fitted to receive the cutting-tool B, in combination with the wedge C, the said wedge C and back of the cutting-tool being provided with corresponding notches or teeth, *a*, so as to interlock, substantially as and for the purpose described.

JOHN F. ALLEN.

Witnesses:

HENRY E. ROEDER,  
RICHARD F. NAGLE.