

*A. F. Hazard,*

*Edge Plane.*

No. 105452.

*Patented July 19. 1870.*

Figl.

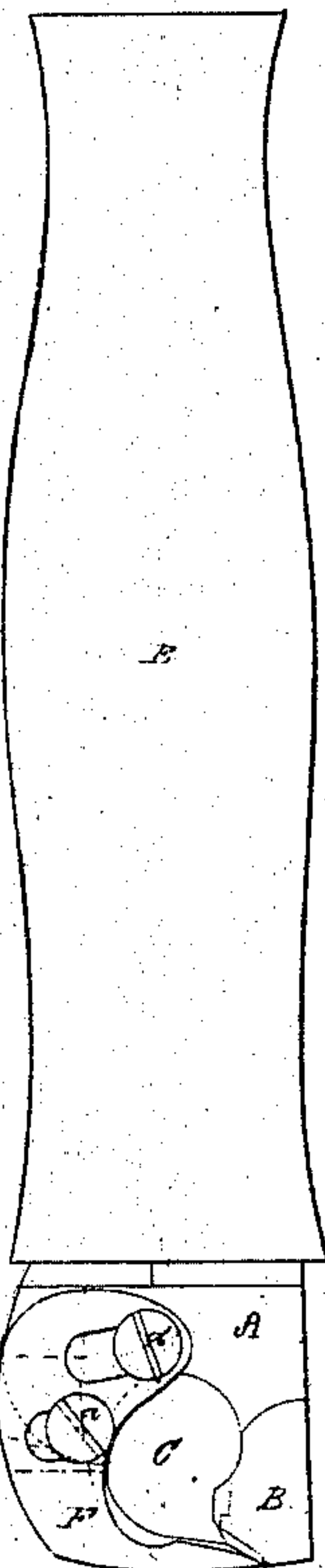
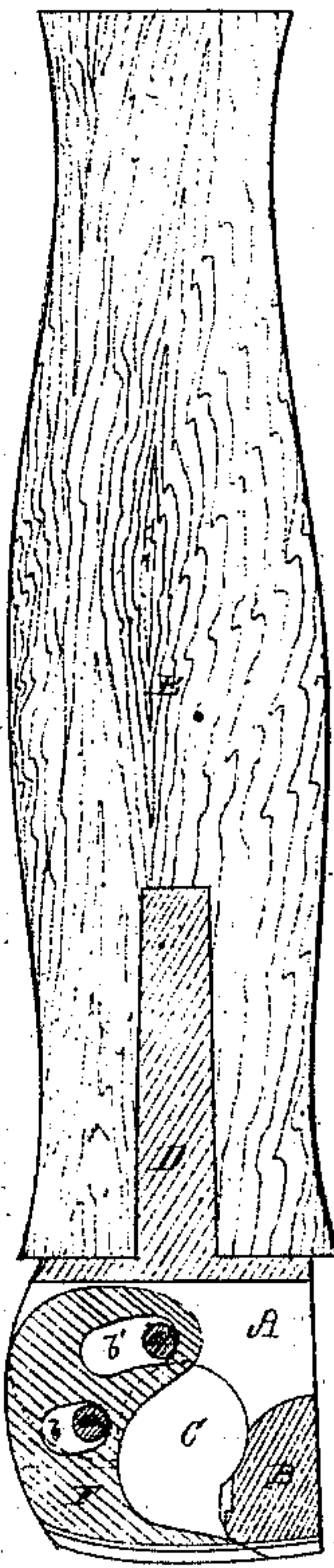


Fig. 2.



*Fig. 3.*

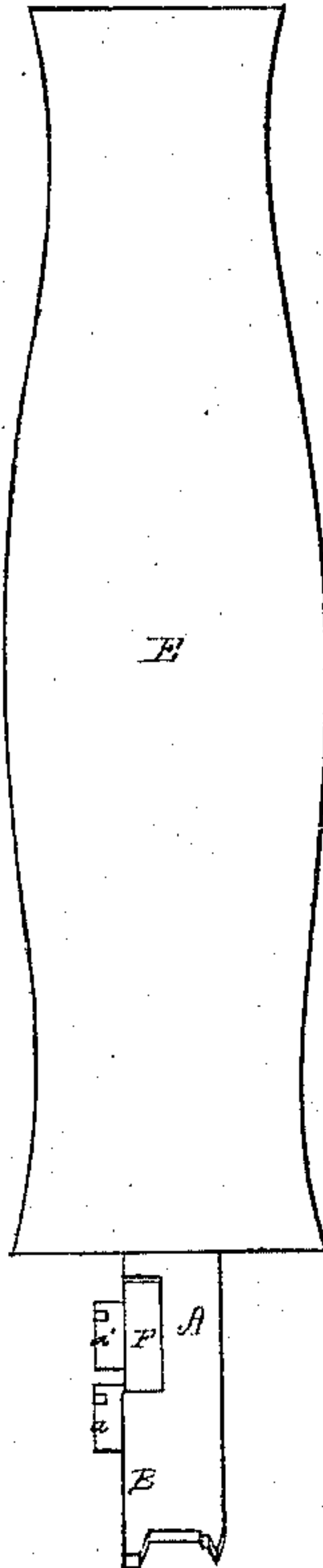
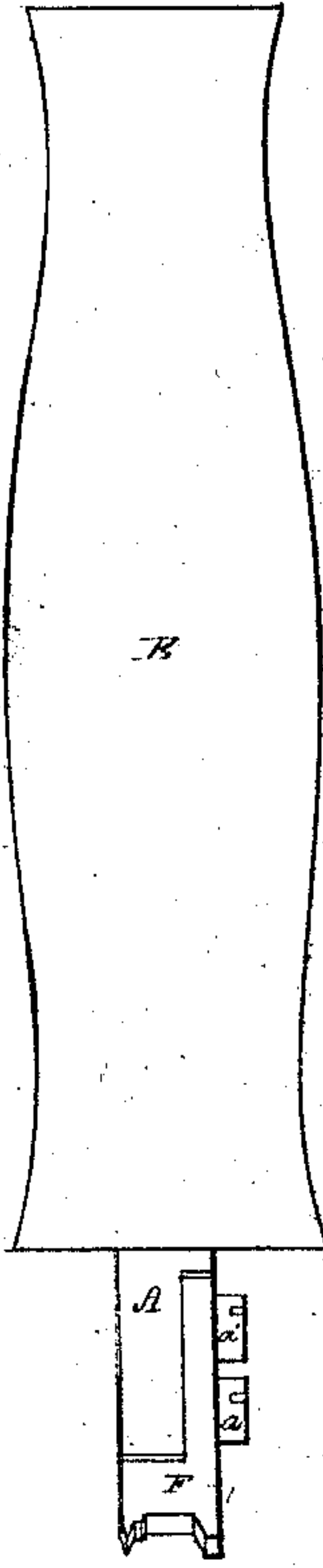


Fig 4.



Witnesses

C. E. Smith

C. C. Todd

Arthur P Hazard.

by his attorney

*T. P. Hale.*



# United States Patent Office.

ARTHUR P. HAZARD, OF NORTH BRIDGEWATER, MASSACHUSETTS.

Letters Patent No. 105,452, dated July 19, 1870.

## IMPROVED SHOEMAKERS' EDGE-PLANE.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, ARTHUR P. HAZARD, of North Bridgewater, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in Shoemakers' Edge-Planes; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

Figure 1 denotes a side elevation.

Figure 2, a longitudinal section.

Figure 3, a front end elevation; and

Figure 4, a rear-end view of a shoemakers' edge-plane, as constructed in accordance with my invention.

My invention relates to that class of devices termed "edge-molding planes," as used by shoemakers in reducing and molding the edges of boots and shoes, in which the molding-edge or part of the implement is formed in two portions, one of which is on the cutter, and the other on the guard; and

My invention consists in a peculiar mode of applying the cutter to the stock, whereby the cutter, as it may become worn, may not only have its cutting-edge moved up and preserved in due relation to the guard, but its molding-surface so adjusted as to maintain its normal or proper curvature with respect to the molding-surface of the guard, in order that the molding-surfaces of the cutter and the guard may rest in contact with the edge of a sole while being molded.

It is a fact well known, that, in edge-molding planes, as made with a guard and detachable knife, no adequate means has been provided by which the cutter and molding-surface, as the former became worn, could be accurately adjusted, to preserve its due correspondence with the guard and its curved molding-surfaces; but, as the cutter became more or less worn, and was moved toward the guard, the nice correspondence of the parts was destroyed, and the tool had to be taken to the factory, and the parts re-adjusted or reduced, to compensate for the wear.

The object of my invention is to enable a workman to readily adjust the parts, and keep them in their due relation until the cutter is worn out, without any reconstruction whatever of the parts.

In the said drawing—

A denotes the stock of the implement, the same being made of a block or piece of steel, and having a guard, B, disposed on its front end.

This guard may be formed in one piece with the block, or may be made separate therefrom, and so as to be adjustable thereon, and connected thereto in any suitable manner, as may be desirable.

O denotes the throat of the tool, which extends transversely through the same, as shown in the drawing.

D is the tang, which extends down from the stock into the handle, E.

F is a curved knife or cutter, which is formed as shown in figs. 1, 2, 3, and 4, and attached to the side of the stock A by means of two screws, *a a'*, which pass through slots, *b b'*, made through the cutter, and screw into the said stock.

These slots are of a slightly curved elongated form, and of a width somewhat greater than the diameter of the shanks of the screws. By means of these slots and screws I can not only readily adjust the edge of the knife with respect to the guard, but, in case of wear of the knife, or as occasion may require, the curved molding-surface of such knife can be easily and accurately adjusted to the desired degree of curvature, to operate to the best advantage with the curved molding-surface of the guard, and so that each part shall have a firm bearing upon the edge of the sole to be reduced or molded, whereby the tool is not only firmly supported and enabled to cut an even shaving from the edge, but serves, at the same time, to more or less condense and polish it.

By my peculiar construction and application of the said knife to the stock, the grinding or sharpening of the knife, when it has become dulled, is an easy operation, as all I have to do is to slightly turn the screw *a* and remove the screw *a'*, the knife turning on the screw *a* as a fulcrum, can be readily turned back a sufficient distance to allow the edge to be reduced upon a grindstone.

In adjusting the knife in its proper position with respect to the guard, I first bring the scarfed edge of the knife to bear on the inclined surface of the guard, and fasten the screw *a*; next, to adjust the cutting-edge of the knife at the proper distance from the guard, I have simply to raise that part of the knife the desired distance, and next tighten the screw *a'*, and the implement is ready for use.

I would remark that I do not confine myself to the formation of the slots in the shank of the knife, and passing the screws through these into the stock, as I sometimes make the slots in the stock and pass the screws through them into the shank of the knife, in which case the heads of the screws would be on the opposite side of the stock.

I do not claim in a sole-edge plane making the knife detachable and adjustable upon its curved shank, as I am aware that such is not new.

What I claim as my invention is—

The combination and arrangement of the screws *a a'*, and the slots *b b'*, with the cutter F, and the stock A, in manner and for the purpose or purposes as set forth.

ARTHUR P. HAZARD.

Witnesses:

F. P. HALE,

ISAAC A. DUNHAM.