

C. BRIDGES.
Block-Planes.

No. 157,438.

Patented Dec. 8, 1874.

Fig. 4.

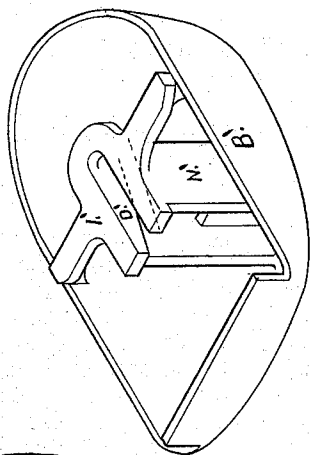


Fig. 3.

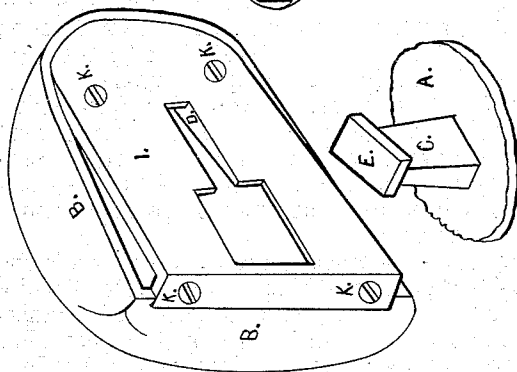


Fig. 2.

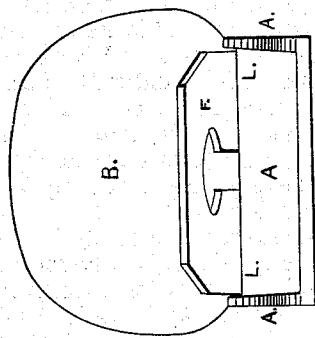
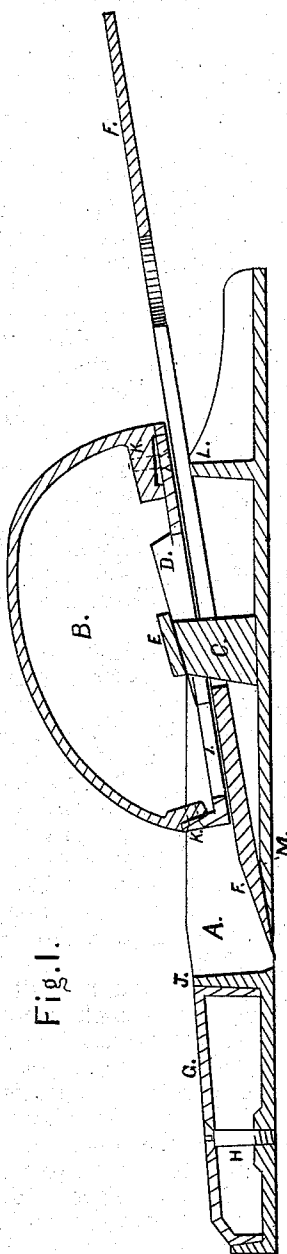


Fig. 1.



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CHARLES BRIDGES, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN BLOCK-PLANES.

Specification forming part of Letters Patent No. **157,438**, dated December 8, 1874; application filed July 28, 1873.

To all whom it may concern:

Be it known that I, CHARLES BRIDGES, of Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain Improvements in Block-Planes, of which the following is a specification:

My invention relates to a metallic block-plane; and consists, first, in the shape of the handle, and, second, in the means of securing said handle and the plane-iron to the stock, as hereinafter described.

In the accompanying drawings, Figure 1 is a general section of my improved plane. Fig. 2 is a rear view of the same. Fig. 3 is a perspective view of the handle, slotted wedge-plate, post, and inclined cap; and Fig. 4 is a view of the handle, slightly modified, and another form of wedge-plate.

A is the metallic stock, having the top of its sides parallel with the bottom thereof, and having an upright post, C, cast in one piece with it. Upon the top of said post is cast a cap, E, the under side of which cap inclines toward the throat. The plane-iron herein used is the ordinary slotted plane-iron F. The post C and cap E are passed up through the broad part of the slot in the plane-iron F, and said iron rests upon the beveled side of the throat, and upon a partition, L, which runs across the stock A, in the usual manner, back of said post C.

The plate I is just wide enough to fill the space between the sides of the stock, is nearly twice as long as broad, has straight parallel sides, is straight in front and rounded out behind, and has in the middle a longitudinal slot wide enough at its front end to allow the cap E to pass up through the plate; but the rest of the slot is only wide enough to admit the post C below said cap. On each side of the narrow part of said slot are cast wedges D, which have the thin end in front. Said plate I is turned up about three-eighths of an inch in front, and is secured to the handle B by screws passing through the ends of said plate.

The top of the handle B is curved backward from the front of said wedge-plate I to the back of the same, its greatest elevation being near the back of said handle. The base of said handle is shaped like said wedge-plate, but is wider. The sides of the base of said handle are parallel with, directly

over, and nearly touch the top edges of the stock A. The handle above its base is broader than the stock, the sides and top of said handle being convex, so that said sides project beyond the stock. The plate I makes such an angle with the bottom of said handle that, when the handle is in the position described, said plate lies flat on the plane-iron F.

From the above description it will be seen that driving the handle forward crowds the wedges D on the plate I under the cap E, and holds the plane-iron F in place.

The transverse partition J, immediately in front of the throat, is commonly used as a finger-rest; but for this purpose I use the hollow panel G in the space between said partition and the rim at the front end of the stock.

A modification of my invention is shown in Fig. 4, consisting of the handle B' and wedge-plate I' cast in one piece, and connected at the sides, and also by the post N', which stands above the plate, and is divided where it joins said plate on each side of the wedges D'. This plate I' is like a piece of the plate I shown in Figs. 1 and 3, cut out around the wedges. The handle B', Fig. 4, is brought down in front, so as to fill the space above the plane-iron, in order to bear upon said iron. In all other respects the handle, plate, and wedges shown in Fig. 4 are like those already described.

The advantages of my invention are, that the handle offers a continuous curved surface to the hand; that its sides, projecting beyond the stock, enable it to be firmly and readily grasped; that, being entirely closed, it does not catch dust and shavings, and that the plane-iron is very easily removed or placed in position.

I claim as my invention—

1. The handle B, as and for the purpose herein shown and described.

2. The combination of the handle B, the wedge-plate I, having the wedges D, the post C, the cap E, the slotted plane-iron F, and the stock A, as and for the purpose herein specified.

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Witnesses:

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