

H. F. MILLER.  
Sheet-Metal Box.

No. 219,645.

Patented Sept. 16, 1879.

Fig. 1.

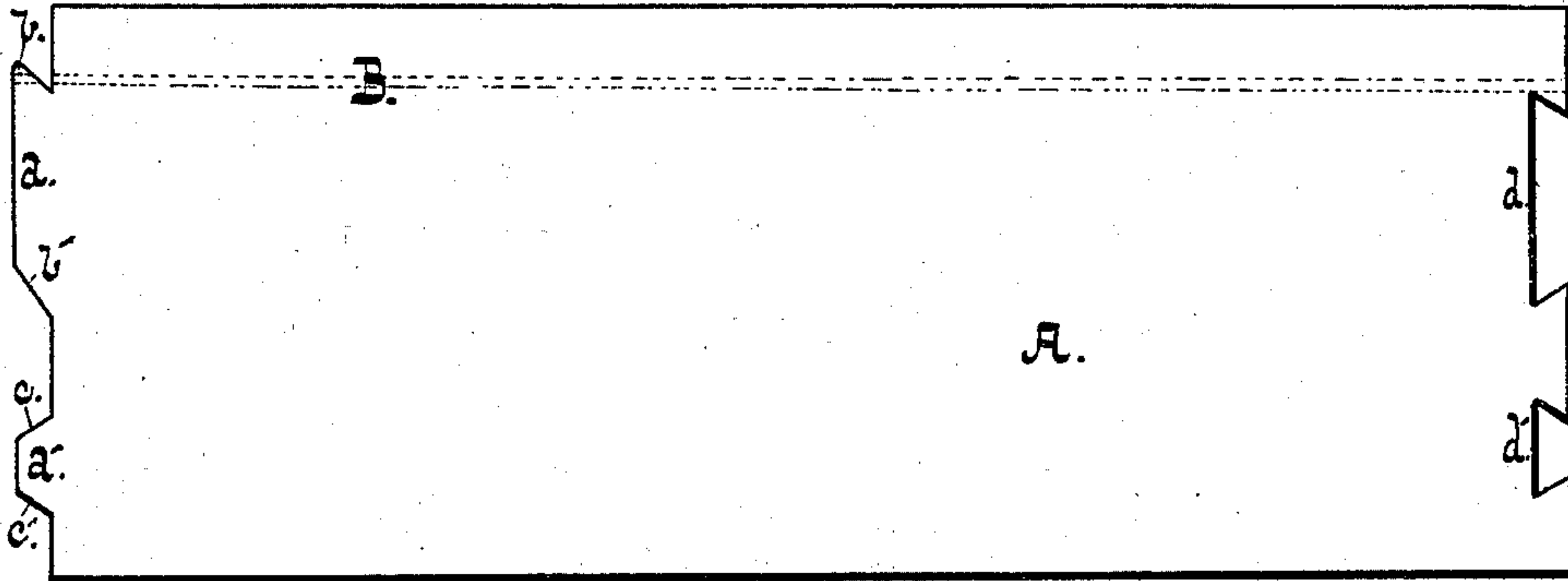
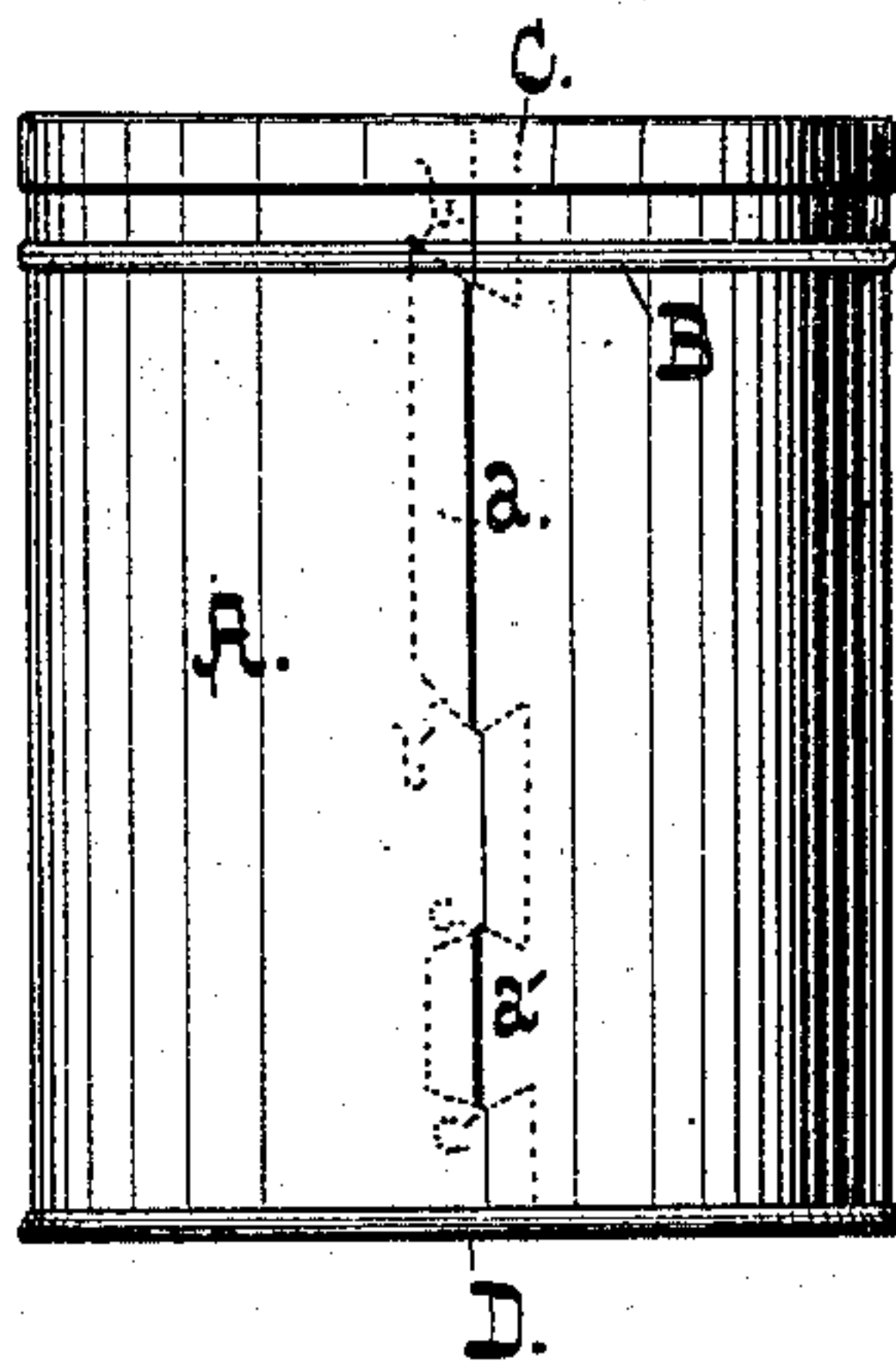


Fig. 2.



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## IMPROVEMENT IN SHEET-METAL BOXES.

Specification forming part of Letters Patent No. **219,645**, dated September 16, 1879; application filed July 15, 1879.

*To all whom it may concern:*

Be it known that I, HENRY F. MILLER, of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Sheet-Metal Boxes; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of the blank for forming the walls of the box. Fig. 2 is a side elevation of the box complete.

My invention relates to that class of sheet-metal boxes in which the side seam is secured by interlocking the ends of the wall-blank, solder being subsequently applied or not; and it consists in forming in the ends of the said blank a series of wedge-shaped tangs and dovetail indentations, and in fitting the parts together in a peculiar manner, the object being to secure a strong and tight joint.

Boxes of this class have heretofore generally been constructed with a series of slots or indentations in one end of the blank, through which correspondingly-shaped tangs on the other end were thrust. The upper tang is made to interlock with the slot, while the lower one is held in place by the crimped edge of the bottom. These slots are made necessarily considerably larger than the tangs, in order to facilitate their insertion. It frequently occurs, however, that burrs are left on the edges of the tangs as the dies by which they are punched become worn, when it, of course, becomes impossible to properly insert them. I obviate this difficulty and secure important advantages by forming the tangs wedge-shaped and slightly wider than their corresponding dovetail indentations, whereby the tangs cut into the blank as they are forced home and form a perfectly tight joint.

In the accompanying drawings, A is the wall-blank, having in one end a pair of tangs, *a a'*, and in the other a pair of indentations, *d d'*. The upper tang, *a*, has a hook, *b*, and a lower edge, *b'*, that meets the side of the blank at a lesser angle than that of the upper edge. The lower tang, *a'*, has its edges *c c'* approaching, as shown, but has not, or need not have,

a hook. The indentations *d d'* are dovetail in shape, and are of a length slightly less than the width of the corresponding tangs. C is the lid, and D the crimped bottom, of the box.

In forming the box, the hooked end of the upper tang is inserted in the indentation *d*, and the lower tang, *a'*, is made to enter the lower indentation, *d'*, both tangs being forced home. As the bottom is next crimped on, the tangs are forced tightly into the bases of the indentations, forming a close and accurate fit. Finally the bead B is formed in the box, crossing the hook *b*, as shown in dotted lines, Fig. 1, securing it in the groove.

It will be seen that as the tangs are wedge-shaped, and slightly longer than the indentations *d d'*, they may be forced into them tightly, admitting of the box being used for carrying impalpable powders, such as snuff, mustard, or flour.

The substitution of the indentations for the slots heretofore used results in a vast economy of time in fitting the parts together, and the crimping of the tang-hook with the bead serves to secure it snugly in place.

The machinery for forming the blank is not so liable to get out of repair as that for forming the slots in the blanks as heretofore made, as the latter demands, in order to produce any approximation to accuracy of fit, to be kept sharp and true.

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

1. The blank for forming sheet-metal boxes, provided with the indentations *d d'* in one end and wedge-shaped tangs *a a'* at the other, one of the tangs being provided with a hook, *b*, substantially as described.

2. The sheet-metal box herein described, having its seam formed by the interlocking of wedge-shaped tangs *a a'* with indentations *d d'*, and having the hook *b* of the upper tang crimped into the bead, as set forth.

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Witnesses:

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