

(No Model.)

D. J. FERRY.

PAPER BOX.

No. 290,018.

Patented Dec. 11, 1883.

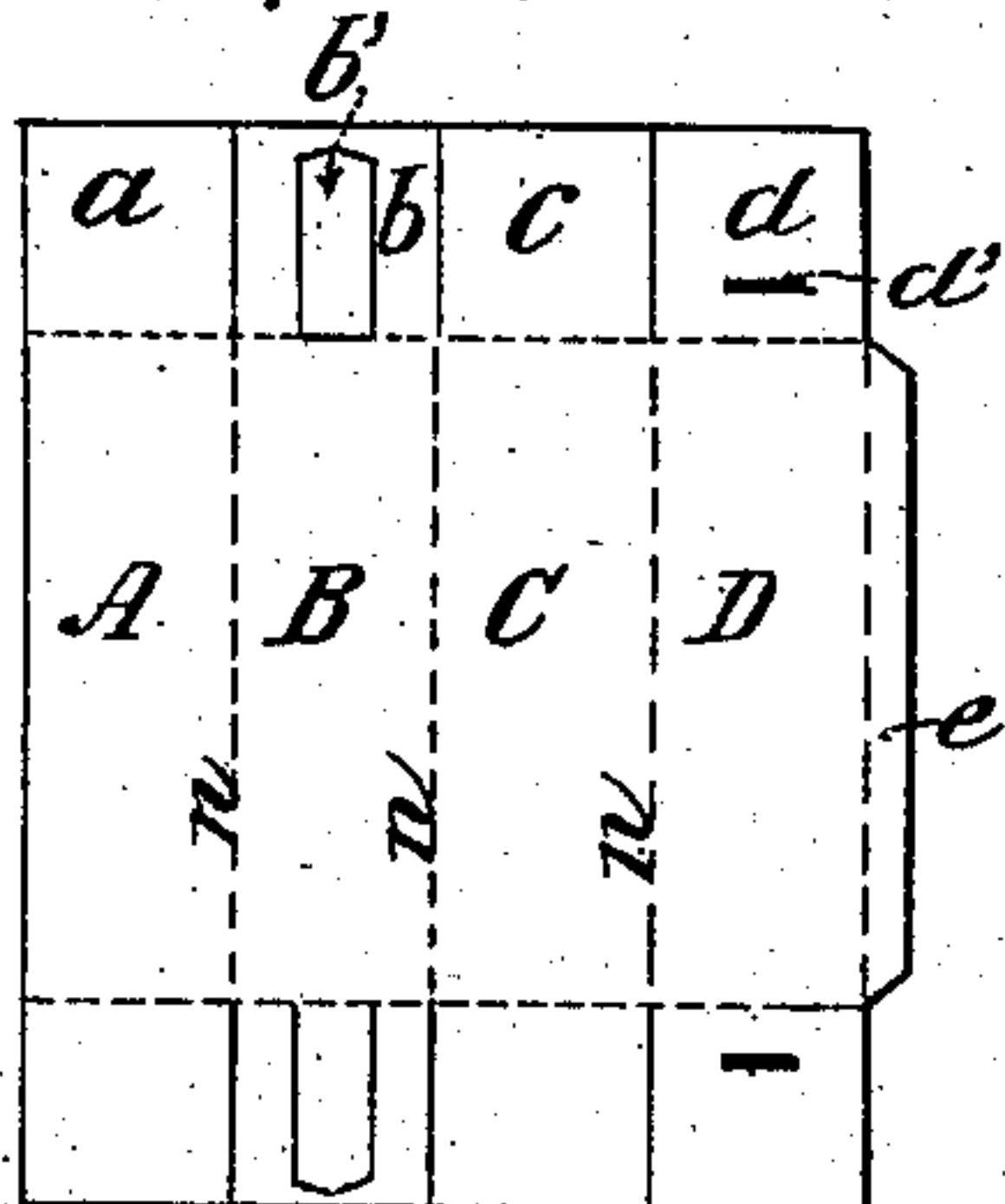


Fig. 1

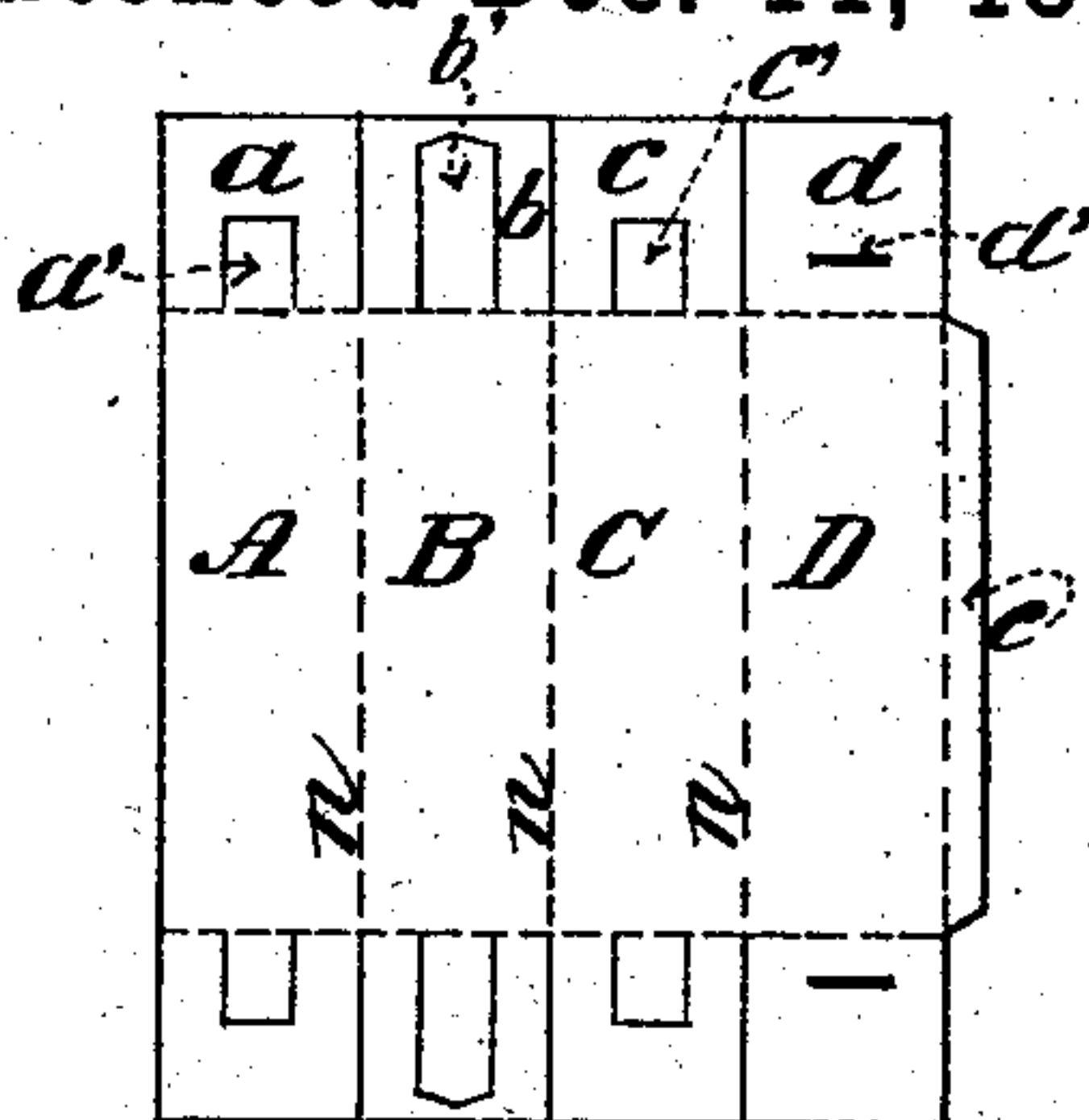


Fig. 5

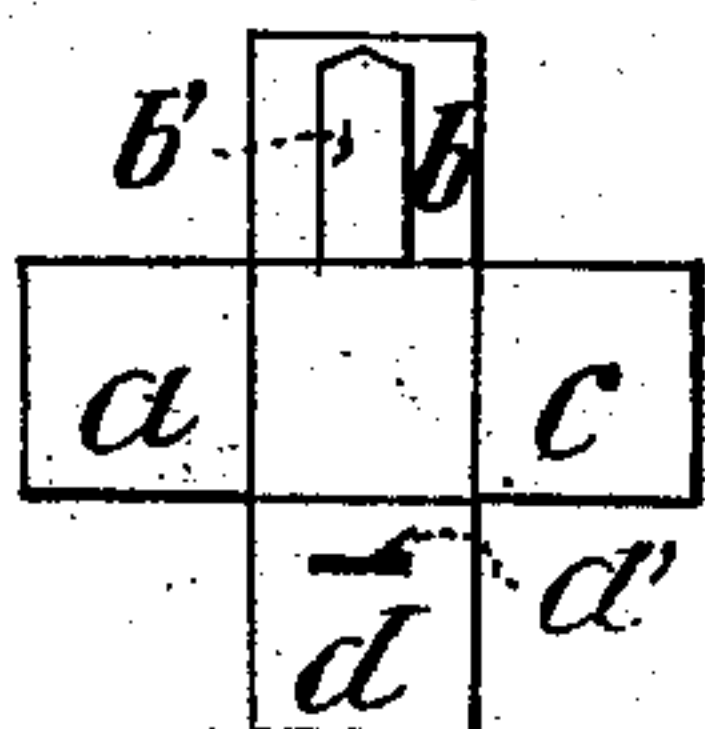


Fig. 2

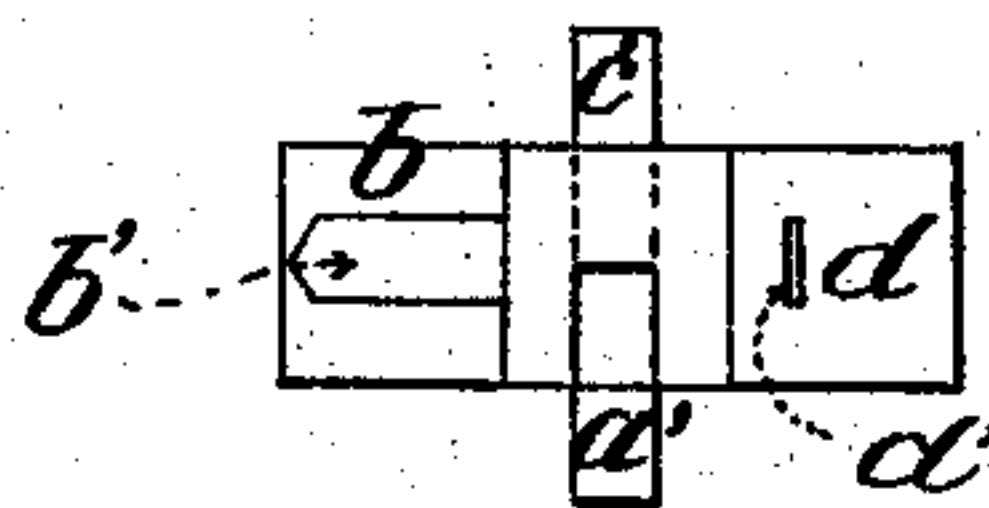


Fig. 6

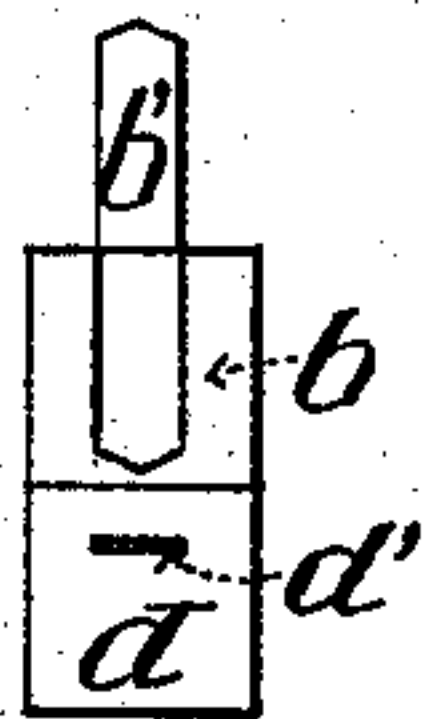


Fig. 3

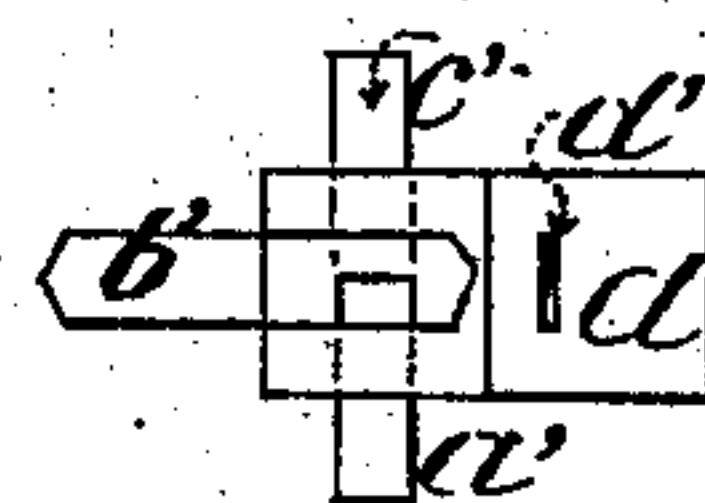


Fig. 7

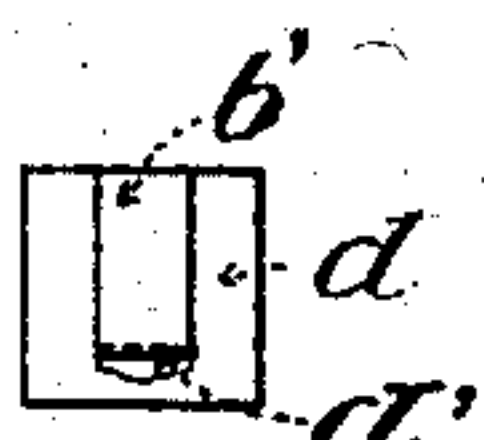


Fig. 4



Fig. 8

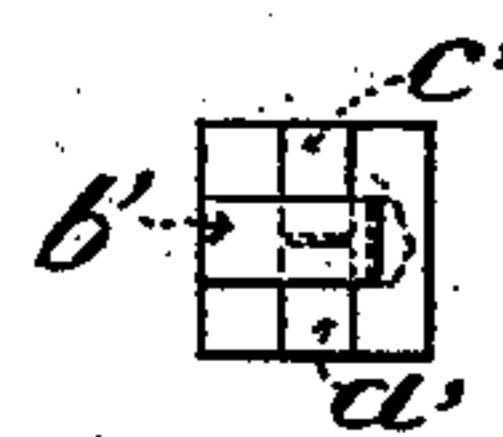


Fig. 9

Witnesses

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PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 290,018, dated December 11, 1883.

Application filed October 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, DANIEL J. FERRY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Paper Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to knockdown paper boxes that are made from a single sheet of paper cut in such a manner that it can be readily folded in box form; and the improvement consists in the manner of cutting the paper to form the locking devices that hold the parts in position.

In the accompanying drawings, Figure 1 represents a plan of the paper cut ready for folding. The solid lines indicate the cuts in the paper, and the dotted lines show where the folds are to be made when forming the box. Fig. 2 is an end view, with the box pasted together and the end flaps thrown back. Figs. 3 and 4 are end views, showing the manner of making the folds. Fig. 5 is another plan of the paper, showing a modification of Fig. 1. Figs. 6, 7, 8, and 9 are end views of the boxes, showing the various foldings of the end flaps.

A B C D represent the parts forming the four sides of the box. *e* is the pasting-flap, by which the sides are secured together. *a b c d* are the end folding flaps. *b'* is a tongue-shaped piece cut in the flap *b*. *d'* is a slit cut in the flap *d* to allow the tongue *b'* to be inserted therein, thus forming the lock. *a' c'* are tongue-shaped pieces in the flaps *a c*. (See Fig. 5.) These are thrown back before the flaps *a c* are folded over.

The paper being cut as shown in Fig. 1, it is folded on the dotted lines *n n*, thus bringing the parts A D together, when they are secured in this position by pasting the flap *c* to the side A, the end flaps being then thrown back, as in Fig. 2. The flaps *a c* are folded inwardly, after which the flap *b* is bent over, leaving the tongue *b'* extended in the position shown in Fig. 3. The flap *d* is then folded

over, and the tongue *b'* inserted in the cut *d'*, thus securely locking the end of the box. (See Fig. 4.)

The modification shown in Fig. 5 is folded in a similar manner on the dotted lines *n n*. The end flaps *a* and *c* are then folded over, leaving the tongues *a' c'* extended, as shown in Fig. 6. The end flap *b* is next folded over, leaving the tongue *b'* extended. (See Fig. 7.) After this the end flap *d* is folded in position. Then the tongues *a'* and *c'*, and lastly the tongue *b'* is bent over and inserted into the slot *d'*. (See Fig. 9.)

In forming the tongues *a'*, *b'*, and *c'*, the flaps *a b c* are not cut to their outer edges; but considerable paper is left between the end of the tongue and the outer edge of the flap from which it is cut. This is done to strengthen the flap, and also to hold it in position, besides being a convenience in folding, as otherwise there would be an additional piece to bend over.

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

1. In a paper box whose ends are closed by flaps folding upon each other, two opposite flaps, one of which is provided with a slot and the other with a tongue loose at the outer end and integral with the flap at the inner end, the latter flap having a portion of the paper left joining the two sides thereof over the loose end of the tongue, substantially as set forth.

2. A paper box composed of the body A B C D and end flaps, *a b c d*, adapted to fold over and cover the ends of the box, the flaps *a b c* having in or near the middle or central parts thereof, and at some distance from the outer edges of the said flaps, the tongues *a' b' c'*, and the flaps *d* having the slits *d'*, to allow the tongues *b'* to be inserted, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL J. FERRY.

Witnesses:

OTIS EGAN,

THOMAS D. MOWLDS.