

(No Model.)

C. L. LOCKWOOD.

PAPER BOX.

No. 331,800.

Patented Dec. 8, 1885.

Fig. 1.

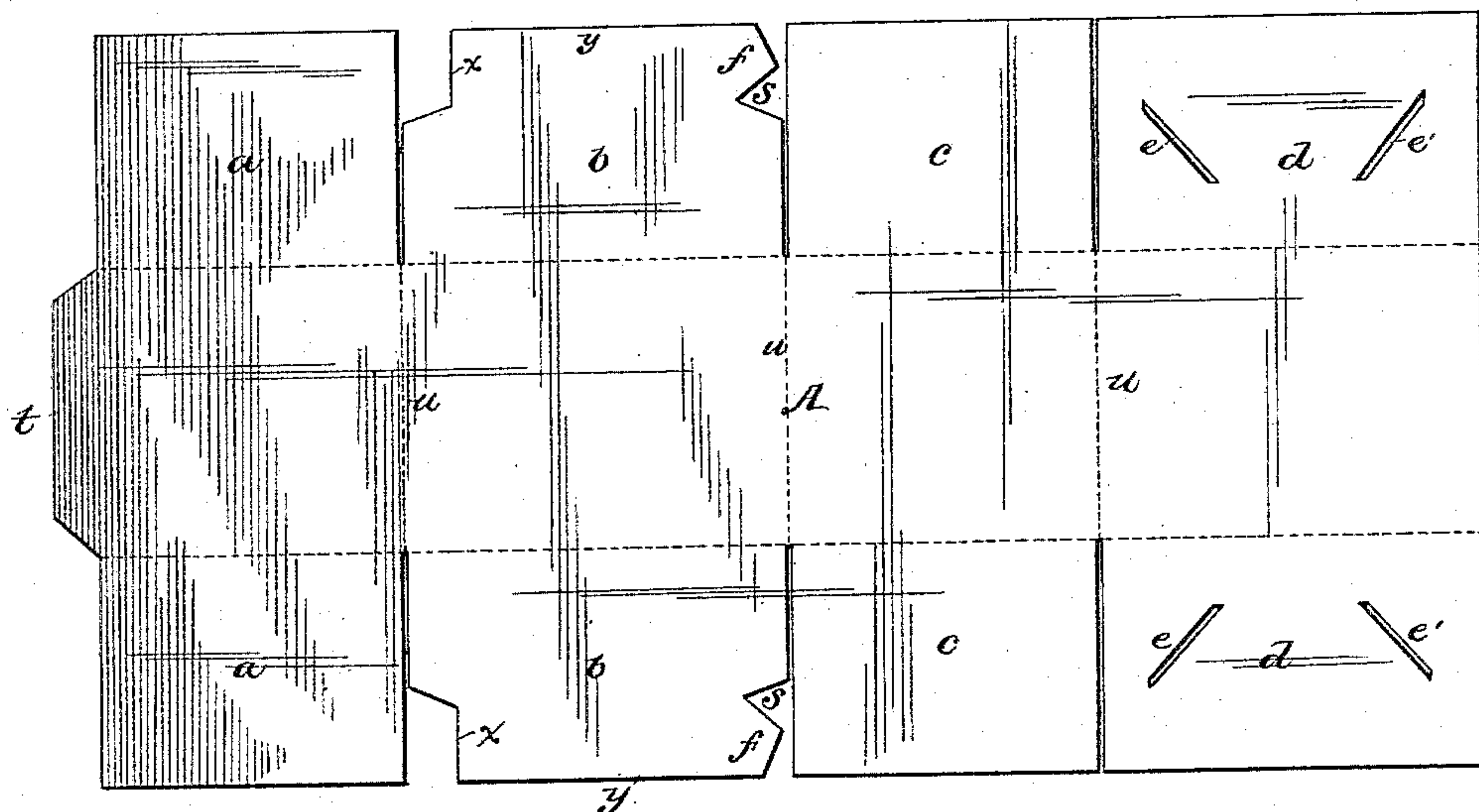


Fig. 2.

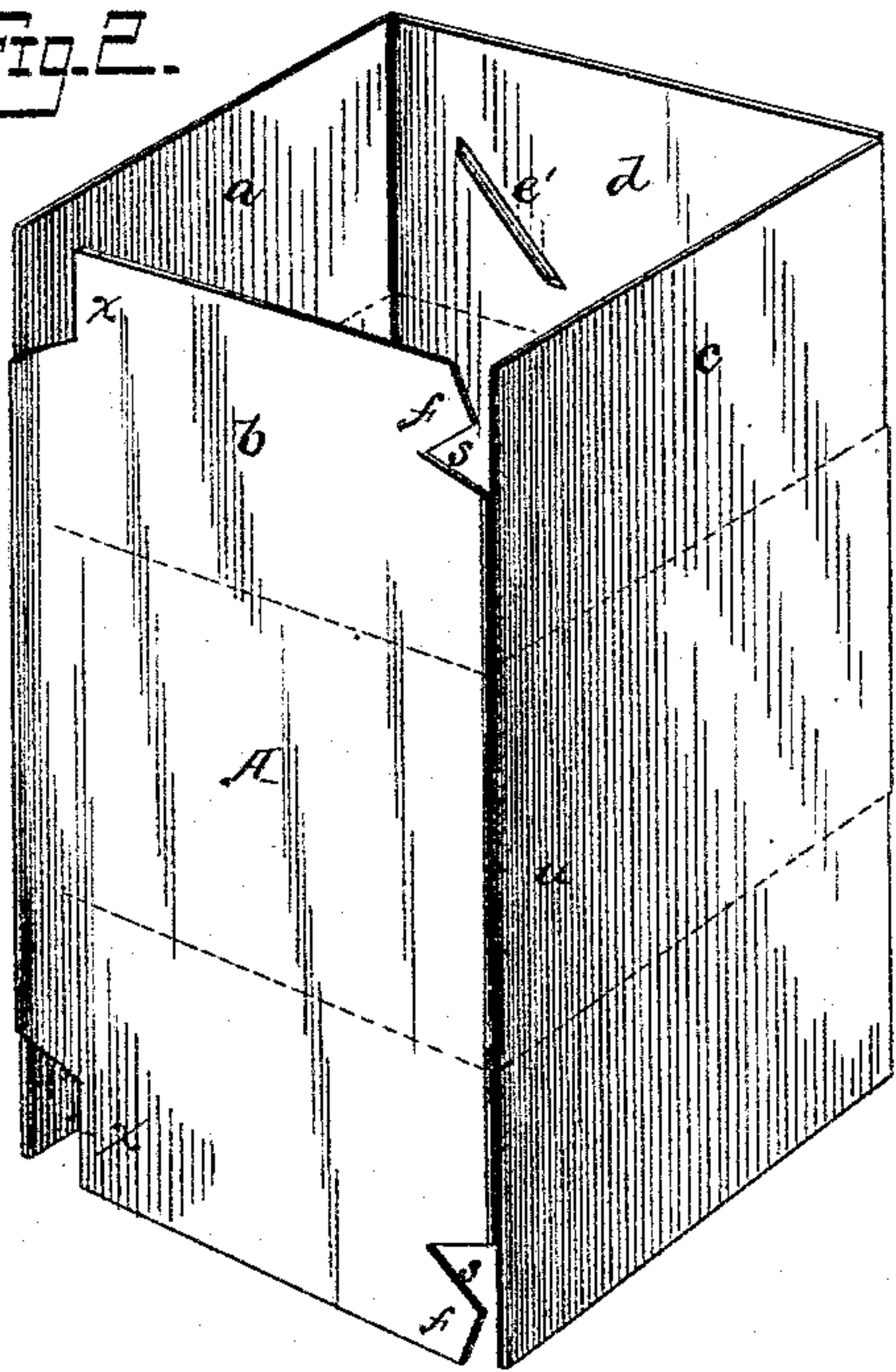


Fig. 3.

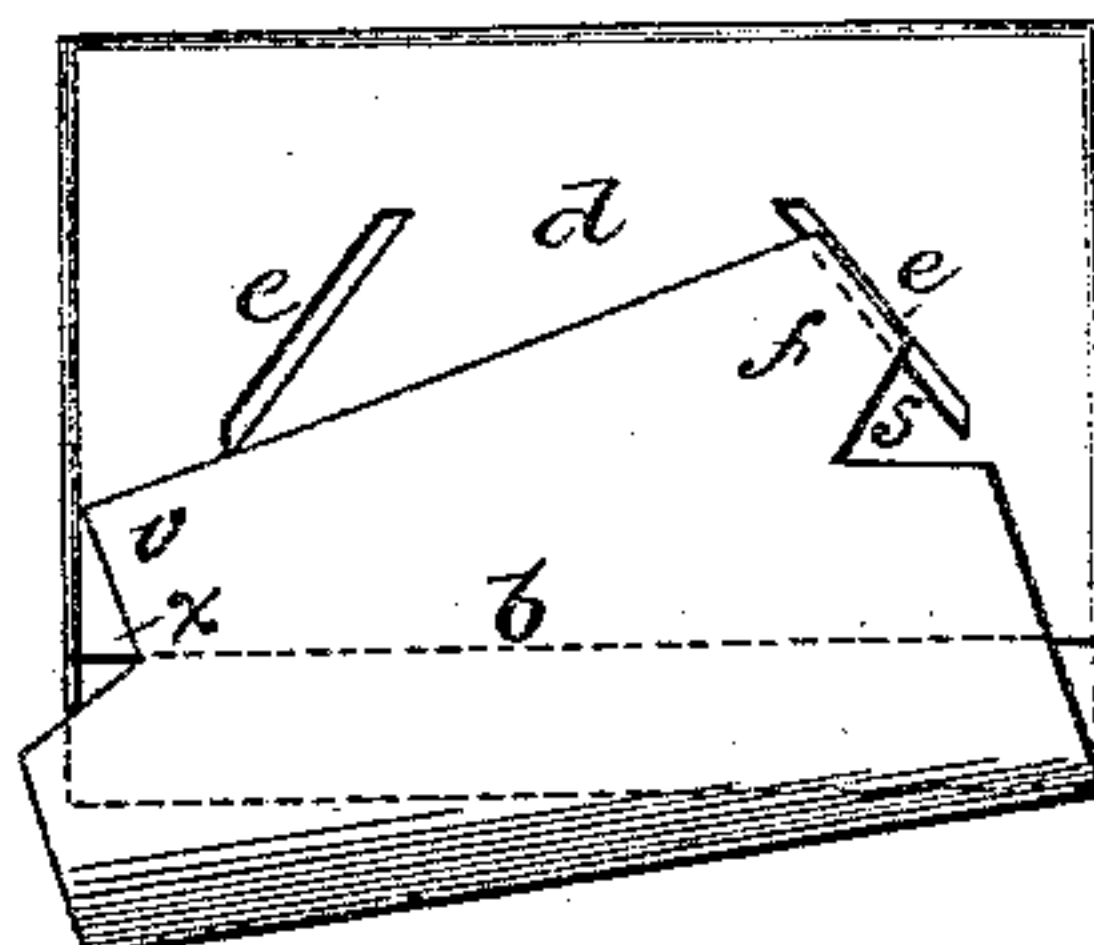


Fig. 4.

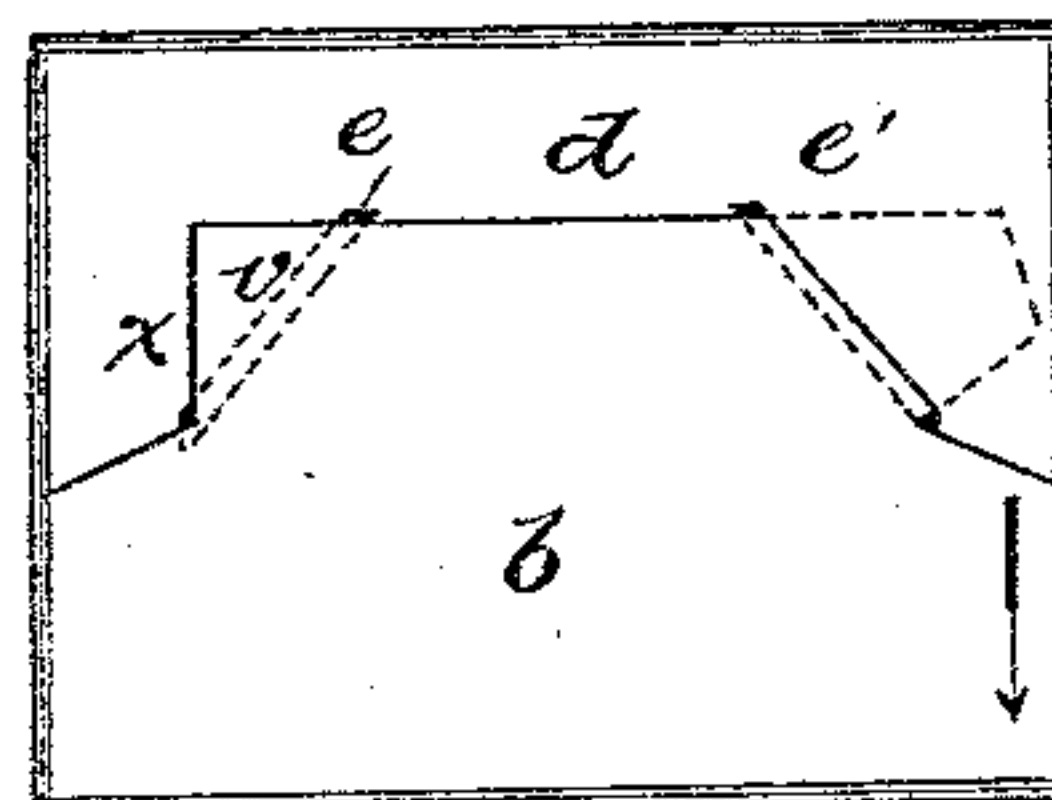
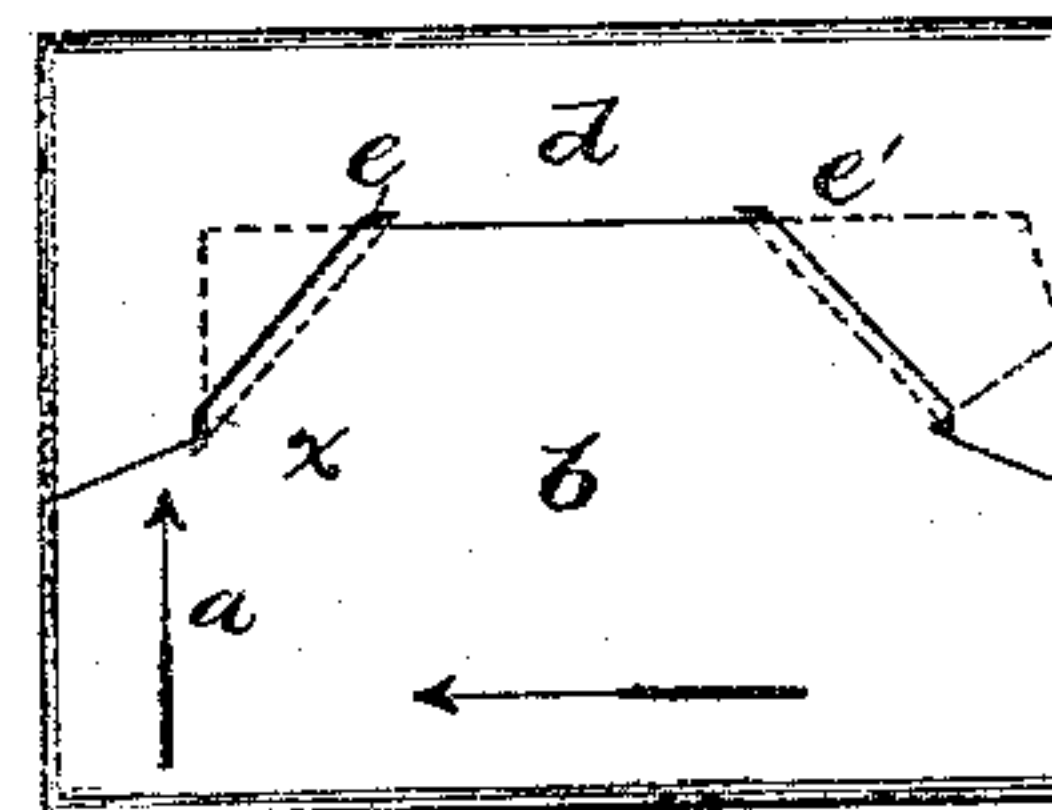


Fig. 5.



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PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 331,800, dated December 8, 1885.

Application filed October 10, 1885. Serial No. 179,538. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. LOCKWOOD, a citizen of the United States, and a resident of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Paper Boxes, of which the following is a specification.

My invention relates to that class of knock-down boxes in which the ends are closed by means of flaps; and my invention consists in providing the sides of the box with flaps constructed in the peculiar manner described hereinafter, so that they may be folded down to form the ends of the box and locked and unlocked without bending and breaking the parts.

In the drawings, Figure 1 is a view representing the form of the blank from which the box is made; Fig. 2, a perspective view showing the blank folded into a square tube; Figs. 3, 4, and 5, end views of the box, showing the different positions of the parts in locking the flaps together.

The blank A, from which the box is to be formed, is cut from a rectangular sheet of paper, so as to form upon each edge four flaps, *a b c d*, the flaps *a a* being plain rectangular flaps, each flap *d* having two diagonal scores or slots, *e e'*, and each flap *b* being cut away or notched at one corner to form an edge, *x*, at right angles to the terminal edge *y*, and being cut at the opposite corner to form a tongue, *f*, having an inclined edge, *s*. At one side of the blank is a tongue or lip, *t*, which is pasted beneath the outer edge of the opposite end of the blank, which is bent upon the lines *u*, so as to form a square tube, as shown in Fig. 2, and the sections terminating in the flaps *b d* are of the same width, and the sections terminating in the flaps *a c* are also of the same width, so that after the square tube is formed it may be flattened into a compact form for transportation and stowage.

When a box is required for use, the flattened blank is opened and adjusted to form a rectangular tube, as shown in Fig. 2, and the flaps *a a* are both bent inward to a horizontal position, overlapping each other and closing the box at the end where they are bent down. The adjacent flap *b* is then bent down upon the flaps *a*, after

which the parts are locked together by means of the locking-flap *d* in the following manner: The hand of the operator is first applied to the tongued edge of the flap *b* so as to bend in this edge, thereby arching the opposite edge, as shown in Fig. 3, and bringing the beveled end of the tongue *f* opposite the slot *e'*, into which it can be introduced by a slight pressure, when, upon releasing the pressure against the edge of the flap, it will spring out, carrying the tongue into the slot, and the flap *b* will lie flat upon the box, as shown in Fig. 4. In this position the edge *s* of the tongue *f* prevents the flap *b* from being drawn back in the direction of the arrow, Fig. 4, by its contact with the inner edge of the slot *e'*; but as the pressure upon the right-hand edge of the flap might unlock it if the parts were in the position shown in Fig. 4, I prevent this by introducing the corner *b* into the slot *e*, so as to bring the edge *x* against the inner end of the slot *e*, as shown in Fig. 5, so that the flap cannot then be moved in the direction of the arrow, Fig. 5, to withdraw the tongue from the slot *e'*. Neither can it be drawn out in the direction of the arrow, Fig. 4, in consequence of the tongue in the slot *e'*, so that the flap *b* is securely locked to the flap *d*, and the end of the box is effectively closed. To open the box, these movements are reversed, and it will be seen that as the edge *x* is straight and parallel to the direction in which the flap *b* must be drawn out (indicated by the arrow *a*, Fig. 5) in order to withdraw the corner *v* from the slot *e*, this can be effected without bending or breaking any of the parts, after which, by bulging upward the left-hand side of the flap *b*, it will be carried to the position shown in Fig. 3 and the tongue *f* withdrawn from the slot *e'*. The opposite end is locked and unlocked in the same manner as above described.

Without limiting myself to the precise construction and arrangement of parts shown, I claim—

1. A knockdown box provided with plain terminal flaps *a a* at two sides, with a flap, *b*, at another side, provided with diagonal slots *e e'*, and at the opposite sides with a flap, *b*, having a tongue, *f*, at one edge and cut away at the opposite corner to form an edge, *x*, at right

angles to the terminal edge of the flap, substantially as described.

2. A knockdown box provided at opposite sides with terminal flaps, one having inclined
5 diagonal slots, and the other having a tongue at one corner and a notch and straight edge at the opposite corner, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES L. LOCKWOOD.

Witnesses:

WM. A. REDDING,
S. SPENCER CHAPMAN.