

No. 643,366.

F. A. STECHER.
PAPER BOX.

Patented Feb. 13, 1900.

(Application filed Oct. 27, 1897.)

(No Model.)

Fig. 1.

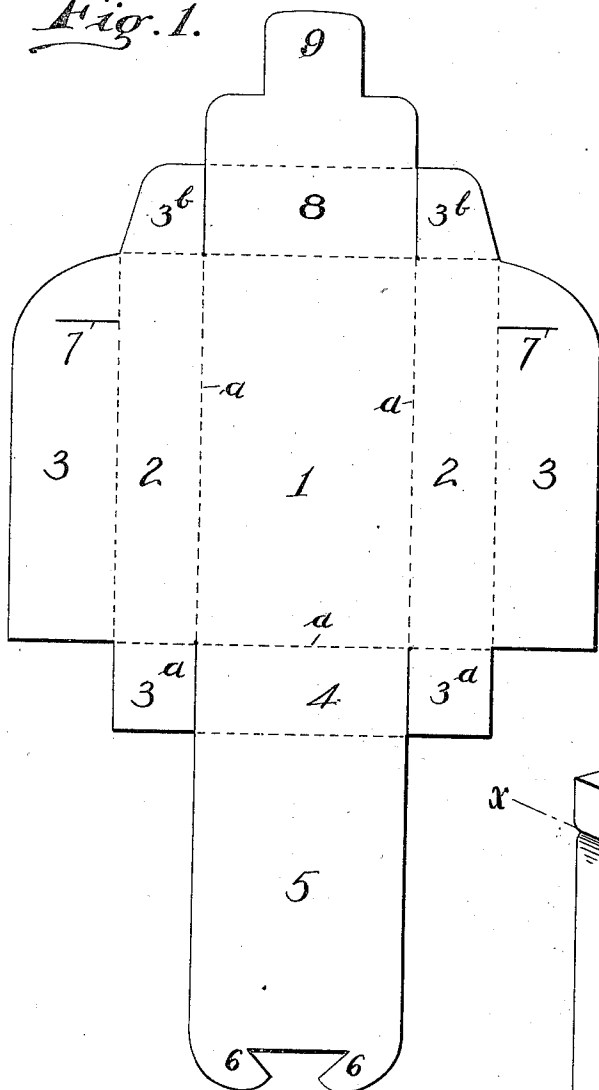


Fig. 2.

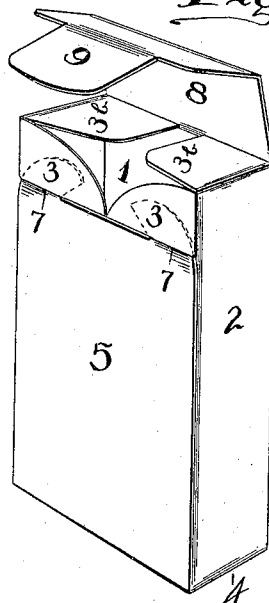


Fig. 3.

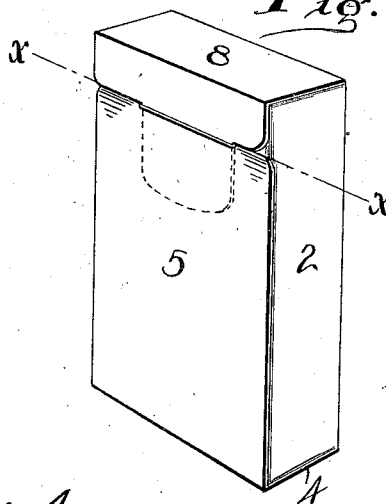
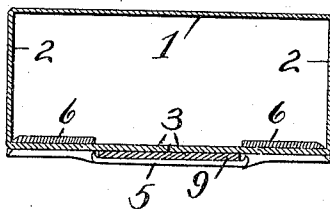


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

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PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 643,366, dated February 13, 1900.

Application filed October 27, 1897. Serial No. 656,570. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. STECHER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Paper Boxes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide an improved box or receptacle, of paper, cardboard, or similar material, formed from a single blank and capable of being shipped flat or in knockdown form and readily set up for use, the various parts so interlocking and coöperating that no paste or glue is required to maintain the box in shape and the entire contents or a portion thereof may be readily removed when desired.

To these and other ends the invention consists in certain improvements hereinafter fully described, the novel features being pointed out particularly in the claims at the end of this specification.

Inasmuch as a box possessing the characteristics of mine is particularly adapted for containing small wares—such, for instance, as cigarettes, lozenges, playing-cards, &c.—I have shown in the drawings a box of the form usually employed for articles of this description; but it will be understood that the specific form or size of the box is not of the essence of the invention, and this might be greatly modified.

In the drawings, Figure 1 is a plan view of a blank for a box embodying my invention; Fig. 2, a perspective view of the box with the lid or cover open; Fig. 3, a similar view with the cover closed; Fig. 4, a sectional view on the line *x x* of Fig. 3.

Similar reference-numerals in the several figures indicate similar parts.

The blank shown in Fig. 1 is formed from a single sheet of cardboard, paper, or similar material and is suitably scored, creased, or otherwise rendered flexible and capable of being folded on the dotted lines *a*, so as to form the central panel 1, constituting the back of the box, and the side panels 2, each of the latter having the flaps 3 at the sides of substantially half the width of the back panel 1. The lower

ends of the side panels 2 are preferably provided with the flaps 3^a, serving to stiffen the bottom of the box somewhat when set up, and at the upper ends are preferably provided closing-flaps 3^b, which protect the upper portion of the contents of the box. At the lower end of the panel 1 is the bottom panel 4, and connected to this the front panel 5, having at its free end the hooked locking ears or tongues 6, adapted to enter the locking-slits 7, formed in the upper ends of the flaps 3 when the box is set up. At the upper end of the back panel is provided the top or cover 8, having the tuck end 9.

The boxes are formed or set up by bending the side panels 2 of the blank up at right angles to the back panel and bending the flaps 3 over parallel with the panel 1. Then the flaps 3^a are turned in and the front panel 5 is bent over the sides 2, and its locking-tongues 6 are entered in the slots 7 at the upper ends thereof, thus securely fastening the parts together and enabling the operator to fill the box and close it by turning inward the flaps 3^b and closing down the lid or cover, passing the narrowed end of the tucking-flap between the front panel 5 and the flaps 3.

It will be noted that the hook connection 6 between the front panel 5 and the flaps 3 is such that any tendency to separate the sides of the box will cause the parts to become more firmly locked, so that there is no danger of the parts being disengaged while it is being filled.

It is desirable, though not essential, that the inner proximate edges of the front flaps 3 be arranged to abut when the box is set up, as shown in Fig. 4, as this has a tendency to maintain the box in rectangular form and in a measure prevents its collapsing when part of its contents have been removed. As the tucking-flap of the lid or cover is inserted between the front panel 5 and the flaps 3 it will not come in contact with the contents of the box, and this renders the receptacle particularly useful for holding tacks, lozenges, or other small materials which would otherwise interfere with the insertion of a tucking-flap.

The particular form of the interlocking tongues or hooks 6 and the slits or recesses 7 with which they coöperate could be changed

or modified as long as the construction is such as to prevent the separation of the sides of the box and to draw the front and bottom panels vertically when the sides are pressed outward, as by the contents of the box, thereby insuring a complete locking and the formation of a close package. This vertical movement of the front and bottom panels is insured in the present construction by making the inner engaging surfaces of the hooks 7 inclined inwardly and upwardly, as shown in dotted lines in Fig. 2.

I claim as my invention—

1. In a folding box, the combination with the side panels, the flaps thereon folding at right angles to the panels and having the horizontal slits, of the panel extending over the flaps provided with the inwardly and upwardly inclined tongues or projections at the sides co-operating with the slits in the flaps, substantially as described.

2. In a folding box, the combination with the back panel, the cover having the tucking-flap, the side panels and the flaps on the latter extending over the back panel, of the bottom panel flexibly connected to the back panel, the front panel flexibly connected thereto extending over the flaps on the sides, the inter-

locking tongues and recesses between the sides of the upper end of said front panel and the upper ends of the side flaps for preventing lateral separation of the latter and leaving a space between front of the side flaps and the front panel for the reception of the tucking-flap on the cover.

3. The herein-described blank for a folding box, consisting of a single sheet of material cut and creased to form the central panel 1, side panels 2, flaps 3, panels 4 and 5, and interlocking projections and recesses substantially as described formed on the panel 5 and the flaps 3, and the cover 8 on the panel 1 provided with tucking-flap 9, adapted to extend between the panels 3 and 5 when the box is set up.

4. The herein-described blank for a folding box cut and creased to form the central panel 1, side panels 2 having the flaps 3 provided with slits 7, and the flaps 3^a and 3^b, the panels 4 and 5, the latter having the locking projections 6, and the cover 8 having the tucking-flap 9.

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Witnesses:

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