No. 650,624. Patented May 29, 1900.

Z. B. WEBB.

FOLDING BOX.

(Application filed Oct. 18, 1899.)

(No Model.)

Fig. 1.

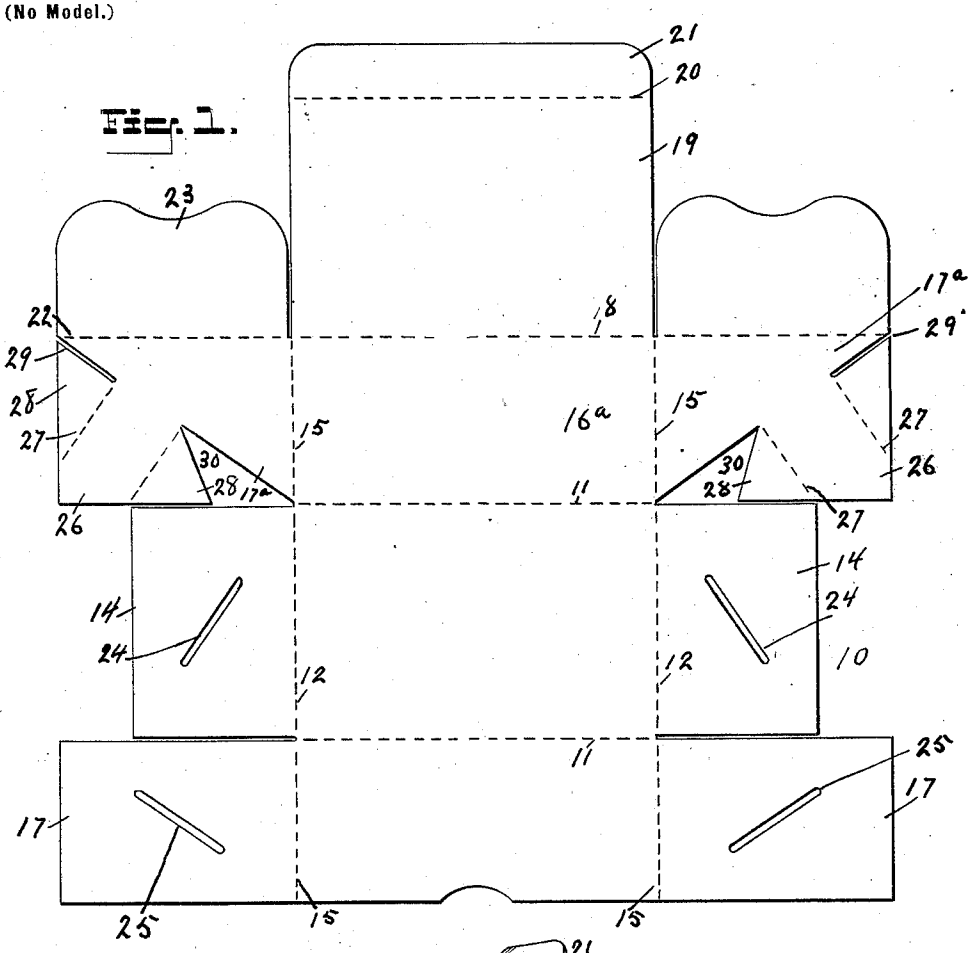
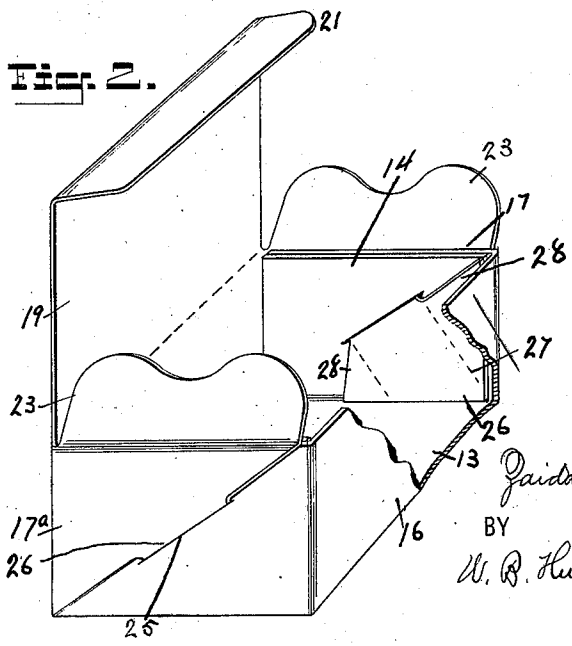


Fig. 2.



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ZAIDA B. WEBB, OF WHIPPANY, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HENRY S. WASHINGTON, OF LOCUST, AND JOHN S. W. THOMPSON, OF MORRISTOWN, NEW JERSEY.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 650,624, dated May 29, 1900.

Application filed October 18, 1899. Serial No. 733,945. (No model.)

To all whom it may concern:

Be it known that I, ZAIDA B. WEBB, of Whippany, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Folding Boxes, of which the following is a full, clear, and exact description.

My invention relates to improvements in folding boxes; and the objects of my invention are to produce a very simple folding box which can be made cheaply, which has the blank shaped so as to be cut economically from the stock, which can be laid out flat or quickly set up for use, and which can be adapted to a great variety of purposes and especially to produce a very quick-acting and strong fastening means for holding the box in its set-up position.

To these ends my invention consists of a folding box the construction and arrangement of which will be hereinafter described and claimed.

In the drawings, wherein similar figures of reference designate similar parts, Figure 1 is a plan or development of the box-blank, showing the same spread out flat; and Fig. 2 is a broken perspective view of the formed box.

The blank 10 can, as in the case of ordinary folding boxes, be made from any suitable material, paper being generally used, and it is provided with parallel score-lines 11 and with other parallel score-lines 12, the lines 11 and 12 intersecting at the corners of the box bottom, and the part between the said intersecting points constitutes the bottom 13 of the box. After passing the end of the box bottom the score-lines 11 are cut through, so as to produce the end pieces 14 of the box, and the score-lines 12 are continued, as shown at 15, thus forming the side pieces 16 and 16^a of the box and also the end pieces and flaps to be hereinafter referred to. The side piece 16^a is continued to form the top 19 of the box, the two parts 16^a and 19 being separated by a score-line 18, and the top is also scored again at 20 to form the tongue 21, which can be tucked inside the box when the latter is filled.

At the ends of the side piece 16 and separated therefrom by the score-line 15 above referred to are the end flaps 17, adapted to fold inward against and parallel with the end pieces 14, and at the ends of the side piece 16^a are angular end flaps 17^a, which are preferably triangular, and on one edge of these and separated therefrom by the score-line 22 are flaps 23, adapted to fold inward beneath the box top and serve as a cover or protector for the contents of the box. It will of course be understood that these flaps are not necessary and form no part of the invention. It will also be understood that the box can be made without the top or cover 19 without affecting the principle of the invention, which lies in the formation of the box ends and in the means for holding the end and side pieces together. Consequently if all the parts above the score-lines 18 and 22 in Fig. 1 were cut off the invention would not be affected, as means would still be shown for forming the box-body, as will appear from the following description:

The box ends 14 are provided with slots 24, and the end flaps 17 are provided with similar slots 25, and when the end pieces 14 are turned up to a vertical position and the end flaps 17 folded inward against them the slots 24 and 25 register, so that the fastening-tongues 26 can be thrust through the said slots and made to bind the end pieces and flaps together to form the box ends. These fastening-tongues 26 constitute a very important part of the invention when taken in connection with their engaging slots. They project obliquely from the angular end flaps 17^a and are adapted to fold at the point 27 and may be scored there, if necessary, thus forming wings 28, which are separated from the parts 17^a, as shown at 29 and 30 in Fig. 1.

To form the box, the end pieces 14 are turned up to a vertical position, the side pieces 16 and 16^a likewise turned up to a vertical position, and the end flaps 17 turned in against the end pieces 14, thus bringing the slots 24 and 25 into registry. The wings 28 are folded inward upon the middle portions of the tongues 26, and the tongues thus doubled are thrust through the registering slots 24 and 25, when the wings 28 are again opened out, as shown clearly in Fig. 2, thus serving as an anchor or fastening means, which effectually pre-

vents the withdrawal of the tongues 26, and thus securely locks the ends and other parts of the box in position. It will be seen from this description that the tongues can be very readily manipulated, as just described, and that the box can be instantly set up. When it is once locked as specified, it cannot be accidentally unlocked, and the parts will not become separated unless the box is actually torn apart.

From the description and by reference to the drawings it will be of course understood that the slots 24 and 25 may be made at any desired angle on the end parts 14 and 17 so long as they register when the parts are folded up as described, and it will also be understood that the flaps 17^a can be made of any desired shape, the only necessary thing being to have the tongues 26 extend in the right direction when folded or doubled with relation to the slots referred to. The angular form is given merely to make a very neat boxing, as shown in Fig. 2; but the change of form affects the design merely and not the function of the parts. It will also be understood that this fastening means is really a means of making the corners of a box, and it can be arranged, as above noted, in many angles and designs without affecting the principle of the invention, the essential part of which consists in having the side and end portions when folded bring the slots into position to receive the doubled tongue, which must of course be formed on one of the box sides, so that when in engagement the side and ends are all bound together.

It will be noticed that when the box is set up as specified it makes no difference so far as forming a good box is concerned whether the end pieces 14 come inside or outside the end flaps 17; but a little neater box is made by having the end pieces on the inside of the box, as shown in Fig. 2.

When the box is formed with the flaps 23 and top 19, they are used like such parts in ordinary boxes—that is, the parts 23 fold inward in the upper part of the box, the member 19 folds down flat over the parts 23, and the tongue is tucked inside the side piece 16.

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

1. The combination with a folding box, of a series of overlapping parts or flaps forming the box end, two of said parts having registering slots, and the third part having a tongue with laterally-extending wings adapted to enter the slot, said wings being arranged to open within the box and prevent the withdrawal of the tongue.

2. As an improved article of manufacture, a folding box comprising a bottom portion having end pieces upon opposite sides, said end pieces being slotted, side pieces on the two remaining opposite sides of the bottom piece, a pair of end flaps on one side piece, said flaps having slots to register with the slots of the end pieces, and a second pair of end flaps on the second side piece, the flaps having tongues to enter the said slots and said tongues being adapted to fold inward from the opposite sides to form fastening-wings, substantially as described.

3. A folding box having oppositely-arranged side and end pieces separated from the bottom by score-lines and adapted to turn up as usual, flaps on the ends of the side pieces adapted to fold inward and overlap on the box ends, one set of flaps and the end pieces being slotted, and tongues formed on the second set of flaps and adapted to project through the slots, said tongues being for a portion of their length wider than their slots thus enabling them to be opened out to prevent their accidental withdrawal.

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