G. L. MORRISON

PAPER BOX.

APPLICATION FILED SEPT. 19, 1913.

1,104,820. Patented July 28, 1914.

Fig. 1.

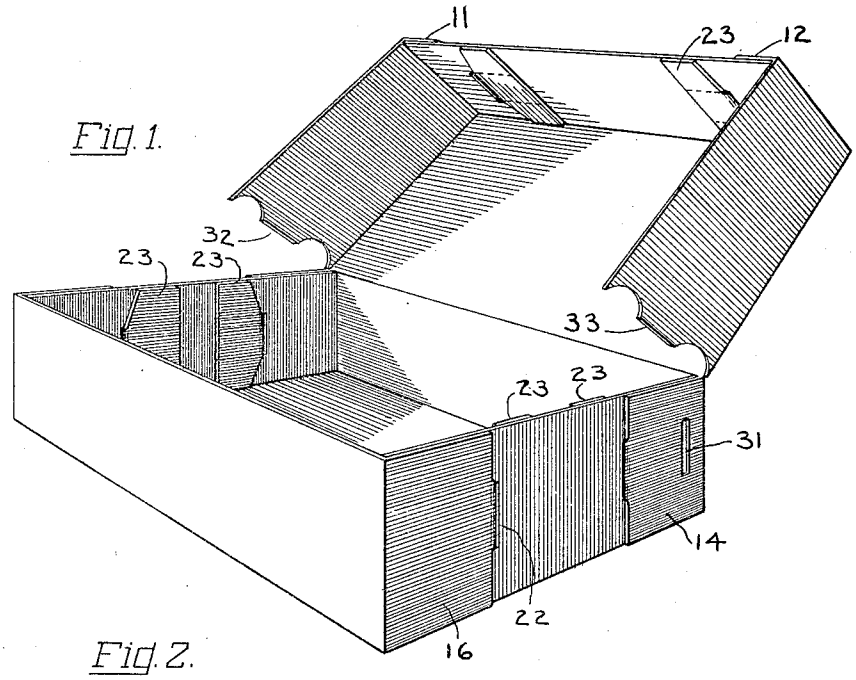


Fig. 2.

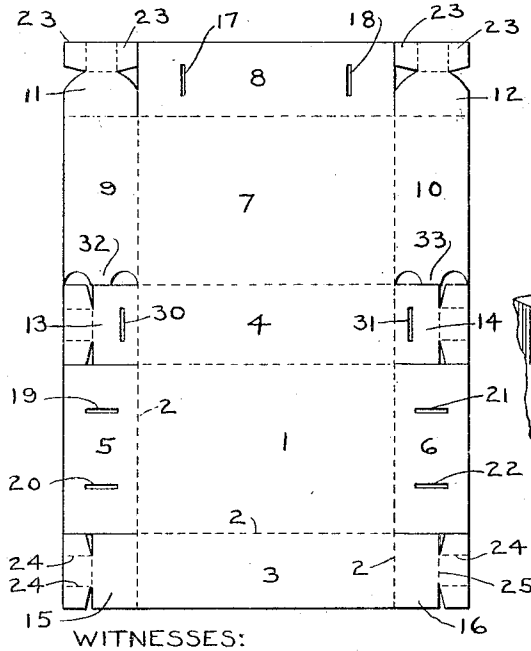
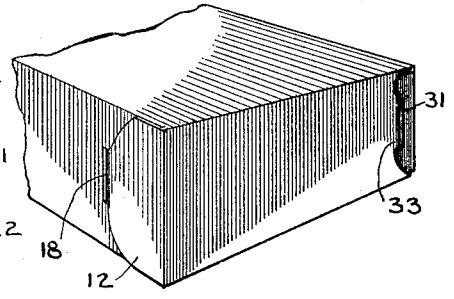


Fig. 3.



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PAPER BOX.

1,104,820. Specification of Letters Patent. Patented July 28, 1914.

Application filed September 19, 1913. Serial No. 790,643.

To all whom it may concern:

Be it known that I, GEORGE L. MORRISON, a citizen of the United States, and a resident of Hudson, in the county of Lenawee and State of Michigan, have invented a certain new and useful Paper Box; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

My invention relates to foldable boxes.

It has for its object, particularly, to provide a foldable blank wherein the folded parts of the blank may be securely locked in box form position, thereby giving a permanent character to the box when formed. A part of the blank forms the cover of the box and is foldable over the top of the box. It has a hinged relation to one of the side walls of the body of the box. Locking tongues, and slots therefor, are used for securing the parts of the blank in folded or box shape relation. The locking tongues have foldable ears. The tongues with ears folded are inserted bodily through the slots and the ears when unfolded engage with the side walls of the box in such a way that they will not permit separation of the parts when under tension.

The invention may be contained in many forms of receptacles. To show that constructions containing my invention are operative and that the invention is practicable I will describe and illustrate a particular embodiment of the invention which I have selected as an example of such constructions, it being understood that it may be greatly varied by those skilled in the art and yet such modifications will still contain my invention.

Referring to the drawings, Figure 1 illustrates a receptacle containing the invention. Fig. 2 is a blank from which the receptacle shown in Fig. 1 is formed, and Fig. 3 shows the cover and its position on the receptacle when closed.

In Fig. 2 is illustrated a box blank, which is foldable along scored lines 2 located on the front of the box which forms the inside surface. The scored lines divide the blank into parts which correspond to the parts of the box and cover. They form the bottom wall 1, the front wall 3, the rear wall 4, and the side walls 5 and 6. They also form the cover 7, the front flange 8 of the cover and the side flanges 9—10. The walls and flanges are secured in position by tongues and slots. The tongues 11, 12, 13, 14, 15 and 16 are formed by the score lines and by incisions in the blank. The tongues cooperate with the slots 17, 18, 19, 20, 21 and 22 to lock the parts in position. The tongues may be located on opposed walls and the slots may be located in the adjoining walls. The slots are located parallel to the corners of the box from which the tongues extend. The walls 3, 4, 5 and 6 are folded so as to form an angle of 90° with the bottom 1, and the tongues are folded inward, while the ears are folded outward. The tongues are then inserted in the slots. The tongue 11 is inserted in the slot 17, and the tongue 12 is inserted in the slot 18. The tongue 13 is inserted in the slot 19, and the tongue 14 is inserted in the slot 21. The tongue 15 is inserted in the slot 20, and the tongue 16 is inserted in the slot 22. The tongues will be securely locked in position and cannot be withdrawn therefrom without ripping off the ears.

The corners of the flange of the cover are inclined to spread and engage with objects when the box is in use. It may, however, be secured in position by means of the slots 30 and 31 located in the box and the short tongues 32 and 33 located on the flanges of the cover. The tongues may be directed into the slots 30 and 31. The edges of slots will hold the tongues 32 and 33 is position.

In order to present uniformity of arrangement of the box and also that the slots 30 and 31 may be covered up, the tongues 13 and 14 are located on the rear wall 4 of the box and locked into the walls 5 and 6. The slots 30 and 31 are located in the tongues 13 and 14 and are covered by the side walls 5 and 6. When the short tongues 32 and 33 are inserted into the slots 30 and 31 they are directed in between the tongues 13 and 14 and the side walls 5 and 6 which tend to hold the tongues 32 and 33 and the side flanges of the cover in planes parallel to the planes of the side walls.

The tongues are provided with ears which

extend laterally on opposite sides of the tongues. The ears 23 have scorings 24 located along the side thereof and on the back of the blank, that is, on the back or outside of the blank or box. They also have scorings 25 which connect incisions forming the ears 23. The scorings 25 connect across the neck of the tongues and are located on the front or the inside of the blank or box. When the tongues are to be inserted in the slots the ears are folded outward along the scoring lines 24 and then the outer ends of the tongues are folded inward along the scoring lines 25 whereupon the outer ends of the tongues together with the ears folded are inserted into the slots. The length of the slots are made substantially the same as the width of the necks of the tongues. The ears lock the tongues in the slots and when the ears are open they press outwardly against the inner sides of the side walls which hold them in substantially the same planes in which the ends of the tongues are located and substantially parallel to the planes of the side walls against which they press.

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

In a box and cover blank having foldable parts forming walls and flanges of the box and cover, tongues located at the ends of parts forming opposed side walls and flanges of the box and cover, and slots located in parts forming adjoining walls and flanges of the box and cover, said tongues having ears located on opposite sides thereof to engage the adjoining side walls at the ends of the slots when inserted in the slots, the tongues located at the ends of the rear wall of a box having slots, the ends of the side flanges of the cover having short centrally located tongues insertible into said last mentioned slots and between the end walls of the box and the tongues of the back of the boxes for holding the side flanges of the cover to the ends of the box.

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

GEORGE L. MORRISON.

Witnesses:
CHAS. C. WHITNEY,
W. R. THOMPSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."