

C. W. ROBINSON.
COLLAPSIBLE BERRY BOX.
APPLICATION FILED DEC. 2, 1919.

1,352,833.

Patented Sept. 14, 1920.

3 SHEETS—SHEET 1.

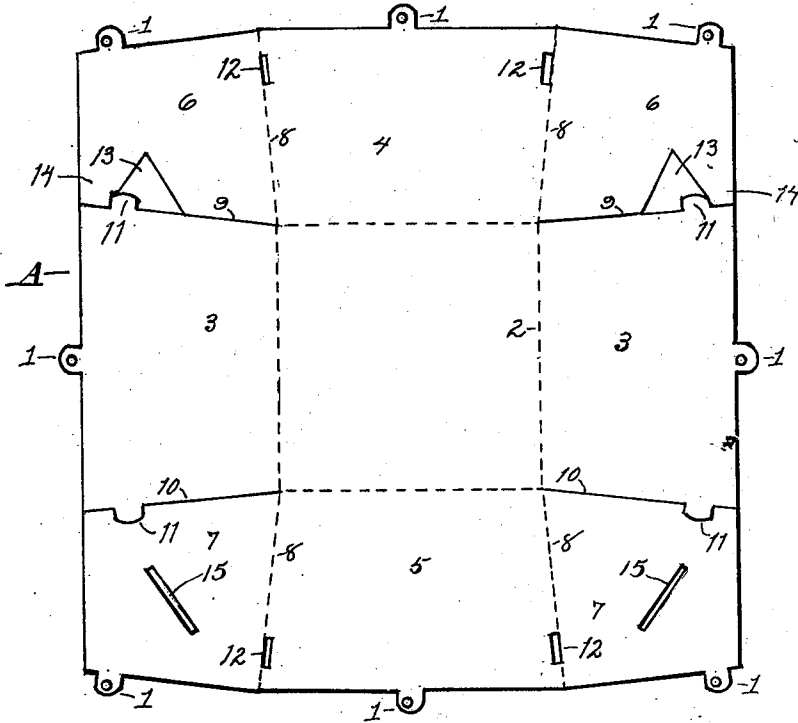


FIG. 1

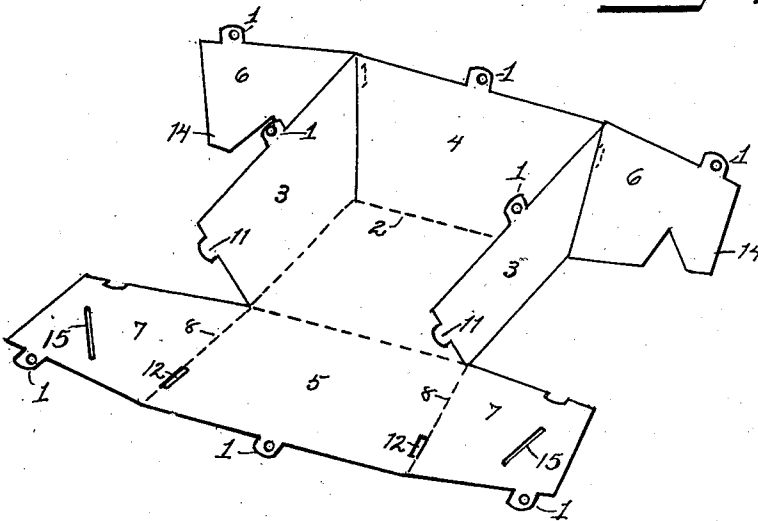


FIG. 2

WITNESSES.

G. F. Richard.

R. F. Morrison.

INVENTOR.

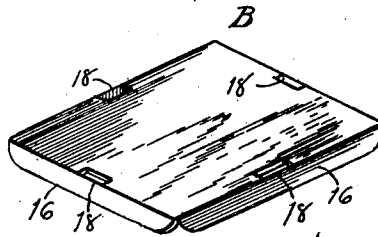
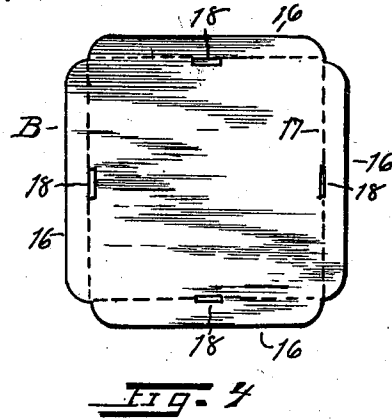
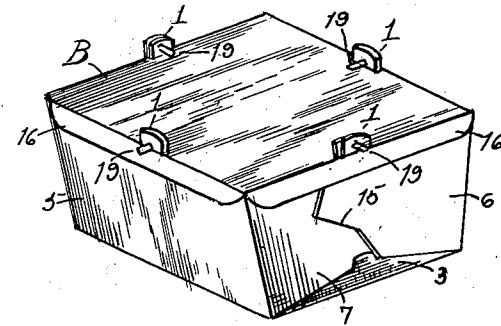
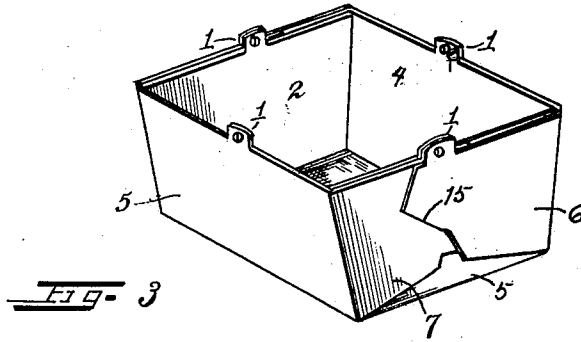
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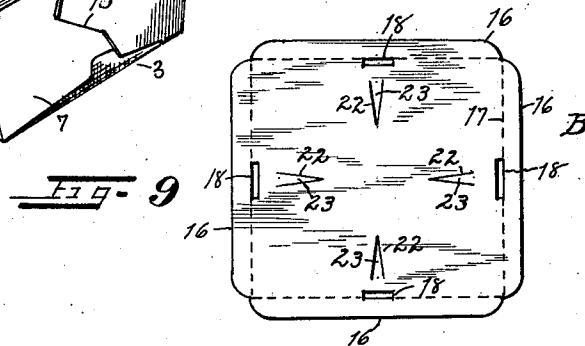
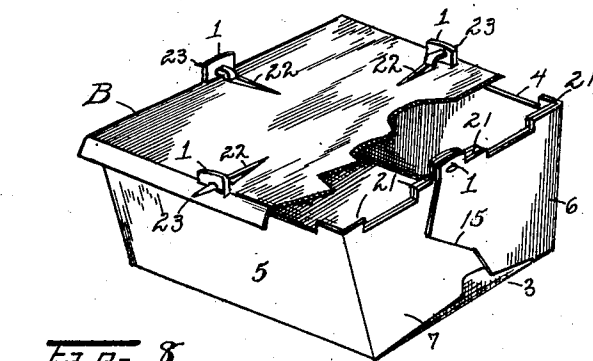
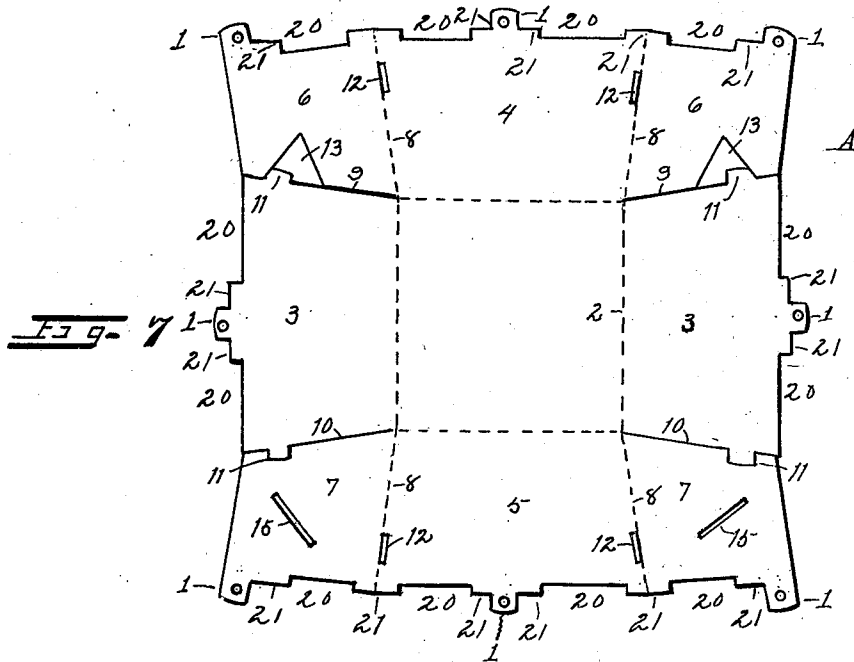
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3 SHEETS—SHEET 3.



WITNESSES.

R. F. Morrison
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UNITED STATES PATENT OFFICE.

CHARLES W. ROBINSON, OF BATTLE CREEK, MICHIGAN.

COLLAPSIBLE BERRY-BOX.

1,352,833.

Specification of Letters Patent. Patented Sept. 14, 1920.

Application filed December 2, 1919. Serial No. 342,028.

To all whom it may concern:

Be it known that I, CHARLES W. ROBINSON, a citizen of the United States, residing at Battle Creek, in the county of Calhoun and State of Michigan, have invented a certain new and useful Improvement in Collapsible Berry-Boxes, of which the following description, taken in connection with the appended claims and accompanying drawings, forms the specification.

This invention relates to collapsible or folding boxes, and has reference more particularly to boxes for berries and small fruit. As generally delivered to the private consumer, both berry and fruit boxes are wrapped in paper and tied with cord, that the contents may be delivered to the consumer in a sanitary condition. An essential object of the present invention is to provide a box of the character whereby the expense of both material and labor for wrapping and tying may be eliminated, and at the same time provide a container capable of adequate ventilation, neat in appearance, strong and capable of being stacked or handled without fear of injury to the contents.

A characteristic feature of the invention lies in the mode of forming and attaching a cover to the box.

Other objects are to so form the box that waste material will be reduced to a minimum; whereby the box can be readily assembled, be strong in structure and capable of being stored or crated for transportation, the one upon the other, without molestation of their contents.

Other objects and advantages will be apparent to those skilled in the art to which the present invention appertains.

In the drawings forming a part of this specification, Figure 1 is a diagrammatic blank form preparatory to forming up a container or box embodying one form of my invention.

Fig. 2 is a box partially folded into requisite shape.

Fig. 3 is a box completely formed.

Fig. 4 is a diagrammatic blank of a cover to the box.

Fig. 5 is a view of the cover formed into requisite shape.

Fig. 6 is a perspective view of a box with its cover attached.

Fig. 7 is a diagrammatic blank form from which another embodiment of a box may be formed.

Fig. 8 is a perspective view of a box with a cover, the cover being partially broken away.

Fig. 9 is an outline blank for a cover for a box.

In the drawings, like marks of reference refer to corresponding or equivalent parts in the different views, in which A is a diagrammatic blank cut into the requisite shape from which a box is formed; B, is a diagrammatic blank cut into the requisite shape from which a box cover is formed. The parts A and B may be of any suitable material requisite for the purpose, such as pulp-board, fiber or other flexible material. As shown, the blank A when folded and interlocked forms a box substantially square cornered on the bottom, with outwardly-flaring sides about the upper edge of which cover-attaching ears 1 are formed. The bottom of the box is outlined by the foldable rectangular score mark 2, and its sides formed from the two oppositely-disposed correspondingly-formed wings 3 and the intermediate oppositely-disposed wings 4 and 5 together with their side flaps 6 and 7, respectively.

Diverging from the corners of the bottom score mark 2, the sides 4 and 5 are foldably score marked on the line 8 radiating from the same. The sides 4 and 5 are separated from the sides 3, 3, by slitting on the marks 9 and 10, respectively, said lines being offset near their outer ends and forming tenons which when the sides are infolded, extend through slots 12 diagonally opposite in the wings 4 and 5. At points near the outer ends of the slits 9, triangular shaped openings 13 are formed in the side extensions 6. Between the outer edges of said extensions and said openings, interlocking biased tongues 14 are formed, which when the sides 3, 3, are infolded, as in Fig. 2, the sides 4 and 5 brought together, as in Fig. 3, and the biased tongues 14 interlocked through the diagonal slots 15 in the side flaps 7, interlocks the box.

Centrally of the sides 3, 4 and 5 on the outer edge thereof, and near the outer side edges of the side flaps 6 and 7, the perfo-

rated cover-attaching ears 1 are provided. These ears are spaced so that when the sides are infolded the ears on the side flaps 6 and 7 will register with the intermediate ears of the respective sides, as shown in Figs. 3 and 8, and also with the ears on the sides 3, 3.

A cover B, corresponding in general outline to the top of the box, is cut away at its corners, and extending from the bottom of these cut-away portions about the cover blank, depending side flaps 16 are bent on the score mark 17. On opposite sides of the cover in alinement with the foldable score marking, slots 18 are formed which register with and are adapted to receive the marginal ears 1 on the box, pins 19 being thrust through the perforations in said ears above the cover and keep the cover from disengagement with the box, and generally brace and stiffen the whole structure.

In the embodiment shown in Figs. 7 8 and 9 the box blank and assembled box are substantially the same as heretofore described, excepting provision for ventilation between the box and its cover. In the present instance the rim of the box is cut away at intervals and provides ventilating slots 20 between which the cover-locking ears 1 are formed, a portion of the blank immediately adjoining said ears being left and forming ledges or shoulders 21 upon which when a box has been folded and interlocked, as hereinbefore set forth, a seat for the cover B is provided, the notches affording ventilation between said cover and the rim of the box.

In lieu of the pins 19 to secure the cover on a box of the character set forth, a cover in general outline like unto the cover shown in Fig. 5 is formed, except that adjacent to the notches 18, converging toward the center of the cover pointed slits 22 are cut. These slits form the outline for integral tongues 23 which may be bent and thrust through the perforations in the ears 1 of the box when the cover B has been seated on the shoulders 20 of the box.

Boxes made in the manner set forth are economical in very many ways, chief of which is the feature of dispensing with paper for wrapping, string for tying and clerical and other assistance in performing said operations. A box of this character is of further importance from the point of ventilation and rigidity of construction, being easily assembled and capable of being stacked either in crates or bundled for handling.

While I have disclosed a box with a separate cover, it would be apparent to those familiar with box manufacture and others, that the box and its cover could be formed of one and the same piece of material and yet embody the essential characteristics

hereinbefore outlined and defined, and I would not be understood as limiting myself to the specific form shown, as I am aware that minor details in its construction could be resorted to without departing from or sacrificing any of the advantages thereof.

From the foregoing description, taken in connection with the accompanying drawings, a more extended explanation of the objects and advantages of the invention is believed not to be necessary.

Having, therefore, set forth my invention, what I claim and desire to secure by Letters Patent, is:—

1. A box formed from a blank comprising a rectangular bottom portion having radiating extensions forming sides, means for interlocking said sides at their intersections, said sides having tongues extending from their edges and holes formed through said tongues, a cover having openings coincident with and adapted to receive the tongues of said cover and pins adapted to engage through said holes and retain said cover on said box.

2. In combination, a box including a cover, said box having a rim formed from indrawn edges of side flaps of a blank forming said box, said rim having upwardly-extending angular shoulders at its corners and intermediate shoulders between its corners, said intermediate shoulders having centrally-disposed upwardly-extending ears with centrally-disposed transverse perforations formed slightly above the alined edges of said shoulders, a cover having slots registering with said ears and adapted to seat on said shoulders, said cover having portions of its material opposite its slotted portions slitted to form integral tongues, said tongues adapted to engage through the perforations in said ears and retain said cover on said box, substantially as and for the purpose set forth and described.

3. In combination, a box including a cover, said box having a rim formed with alternate shoulders and cut-away portions, ears having perforations extending in alinement above said shoulders, a cover having slots registering with said ears adapted to seat on said shoulders, said cover having slitted portions adjacent to said slots forming tongues adapted to engage through the perforations in said ears above said covers, as and for the purpose set forth.

4. In combination, a box including a cover, said box being formed from a flexible blank infolded to form a rectangular bottom and inclosing sides, said sides being interlocked with one another, the indrawn edges of said sides forming a rim, said rim having angular shoulders at its corners and oppositely-disposed shoulders on intermediate portions of said rim, ears extending above said intermediate shoulders having

perforations, a cover having slots registering with said ears adapted to seat on said shoulders, said cover having slitted portions adjacent to said slots, tongues formed in said
5 cover by integral portions formed by said slits adapted to be bent to engage through a perforation of an ear extending through a

slot adjacent to the slit forming said tongue, substantially as, and for the purpose set forth.

CHARLES W. ROBINSON.

Witnesses:

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N. O. SYLVESTER.