E. W. CORNELL.

PAPER FRUIT BOX.

APPLICATION FILED NOV. 3, 1908.

922,459. Patented May 25, 1909.

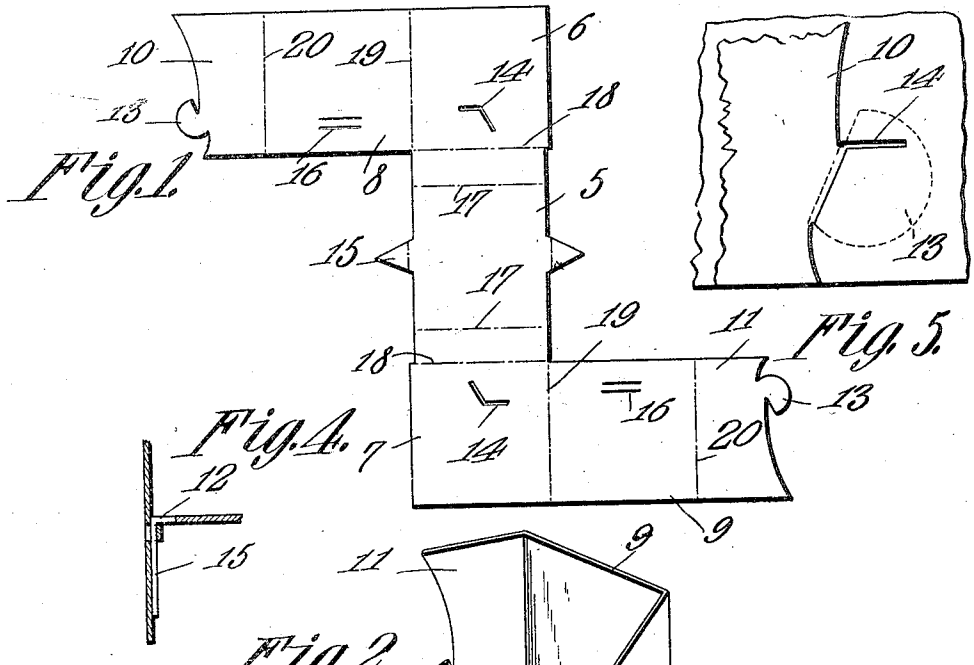


Fig. 1.

Fig. 5.

Fig. 4.

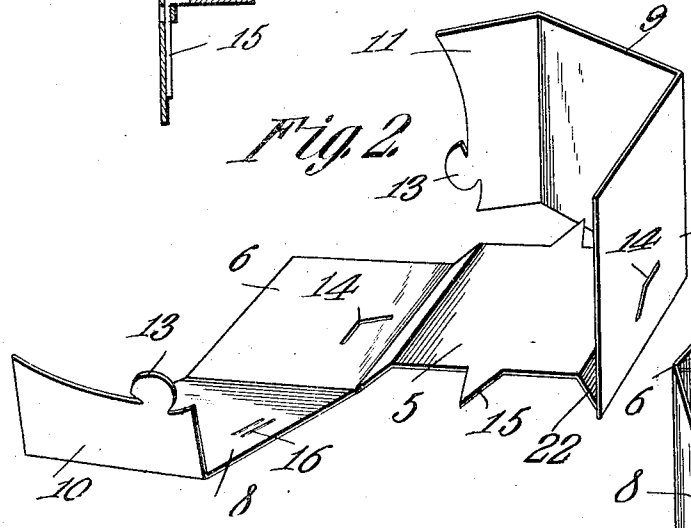


Fig. 2.

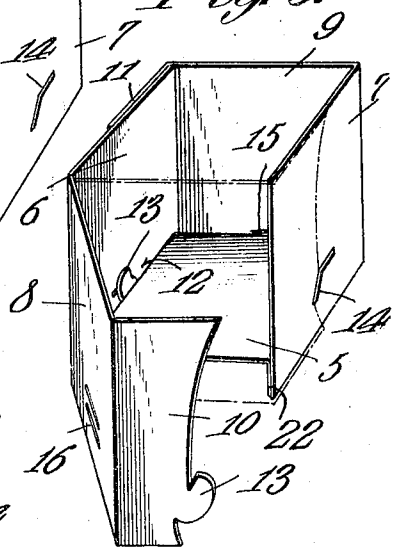


Fig. 3.

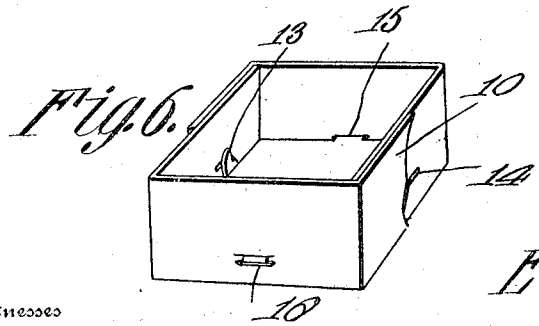


Fig. 6.

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UNITED STATES PATENT OFFICE.

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PAPER FRUIT-BOX.

No. 922,459. Specification of Letters Patent. Patented May 25, 1909.

Application filed November 3, 1908. Serial No. 460,841.

To all whom it may concern:

Be it known that I, ELMER W. CORNELL, a citizen of the United States, residing at Traverse City, in the county of Grand Traverse and State of Michigan, have invented a new and useful Paper Fruit-Box, of which the following is a specification.

This invention relates to collapsible berry boxes and has for its object to provide a comparatively simple and thoroughly efficient device of this character capable of being readily set up for use and quickly collapsed and compactly folded for transportation or shipment.

A further object is to provide a ventilated berry box having its bottom portion spaced from the side walls of the box to permit the passage of air through the contents of said box.

A further object is to form the bottom section with laterally extending ears or tabs arranged to enter slots in the adjacent side walls of the box, thereby to assist in supporting the bottom section and preventing sagging of the latter incident to the weight of the contents of said box.

A still further object of the invention is to provide a berry box which may be manufactured with the least possible waste of stock and in which the parts, when combined or set up, shall mutually brace each other, thereby to prevent collapsing or yielding under ordinary use.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification:—Figure 1 is a plan view of the blank from which the box is constructed. Fig. 2 is a perspective view of the blank showing the latter partially folded. Fig. 3 is a perspective view of the box complete, one of the side walls being moved to open position to more clearly show the construction of the box. Fig. 4 is a detail vertical sectional view showing the manner of spacing the bottom section to permit ventilation and also showing the manner of supporting said bottom section. Fig. 5 is a detail side elevation showing the manner of locking the end walls. Fig. 6 is a perspective view of a modified form of box.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved berry box forming the subject matter of the present invention is preferably constructed of a single piece of material such as pasteboard, veneer, or other suitable material adapted for the purpose, and by preference will have that surface which will form the interior of the box treated with water proof material such as paraffin and the like.

The blank is substantially Z shape in contour and comprises a bottom section 5 having integral end sections 6 and 7 and side sections 8 and 9 extending laterally therefrom and provided with terminal flaps 10 and 11.

The material forming the bottom section 5 is of less width than the material forming the end and side sections of the box so that when the blank is folded into shape the longitudinal edges of the bottom section will be spaced laterally from the adjacent side sections 8 and 9 to produce ventilating openings 12, thereby to permit the passage of air through the contents of the box and thus thoroughly ventilate the latter.

The flaps 10 and 11 are each provided with locking tabs 13 arranged to enter substantially L shaped slots 14 formed in the adjacent end walls 6 and 7, thereby to lock the end walls in assembled position, as best shown in Fig. 5 of the drawings.

Extending laterally from the opposite longitudinal edges of the bottom section 5 are substantially triangular shaped ears 15 which enter suitable pockets formed in the adjacent side walls 8 and 9, thereby to assist in supporting the bottom section and preventing the latter from sagging under the weight of the contents of the box.

The ear-receiving pockets are preferably formed by producing longitudinal slits 16 in the material forming the side walls 8 and 9, and the material between the slits 16 bent laterally so as to permit the passage of the ears 15, as best shown in Fig. 4 of the drawings.

In folding the blank shown in Fig. 1 of the drawings the bottom section 5 is first folded on the line 17 and the end walls 6 and 7 folded upwardly on the lines 18 so as to space the bottom section 5 from the lower edges of the end sections 6 and 7. The side sections 8 and 9 are then folded laterally on the lines 19 and the flaps 10 and 11 folded over the adjacent end walls 6 and 7 by bending said

flaps on the lines 20 after which the locking tabs 13 are inserted in the L shaped slots 14 and the ears 15 introduced within the pockets formed by the slits 16 in the side walls and in which position said ears will be effectually housed and protected.

Attention is here called to the fact that the locking tabs 13 are disposed near the bottom of the box so that the weight of the berries or other contents of the box will expand the walls at the lower end thereof and thereby cause said locking tabs to firmly engage the walls of the slots 14 thereby to prevent collapsing of the box. It will also be noted that the hooked end of each tab 13 extends within the box for engagement with the adjacent wall of the box at the slot 14.

That portion of the paper between the fold lines 17 and 18 not only serves to reinforce and strengthen the bottom of the box but also forms a flange 22 for spacing the bottom section above the lower edge of the box so as to permit the air to circulate beneath the bottom section and up through the openings 12 when said box is placed on the usual perforated supporting tray.

The berry box shown in Figs. 2 and 3 of the drawings is a quart size box, while the box shown in Fig. 6 is adapted to contain a pint, the latter box being of less depth than the quart size box and formed of a narrow strip of stock. A further advantage in having the fastening device of the box shown in Figs. 2 and 3 arranged near the bottom thereof is that the side and end walls of the quart size box may be readily cut or severed to produce a pint box without injuring said fastening device.

It will thus be seen that there is thus produced a collapsible berry box formed of a single piece of paper stock so constructed that when folded, the several parts will be locked in assembled position and any weight of the berries within the box pressing laterally against the walls of said box will only tend to more firmly hold the walls in engagement with each other.

Having thus described the invention what is claimed is:—

1. A berry-box comprising a bottom portion having depending extensions, side walls formed integral with said extensions, end walls integral with the side walls and provided with terminal flaps arranged to overlap the adjacent side walls of the box and provided with locking tabs adapted to enter openings formed in the side walls, two of the edges of the bottom wall being spaced from the adjacent end wall and provided with intermediate spurs arranged to enter transverse slits formed in said end walls, with their pointed terminals extending below the horizontal plane of said bottom section, said spurs serving to space the adjacent edges of the bottom wall from the side walls and also serving to lock the bottom wall in engagement with said side walls.

2. A blank for fruit boxes formed from a single piece of material and comprising a bottom section having oppositely disposed end sections formed integral therewith, a side section extending laterally from one side only of each end section and provided with spaced slits, end flaps carried by the side sections for engagement with the end sections, and locking ears extending laterally from the bottom section and arranged to enter sockets formed by the slits in the side sections when the blank is folded.

3. As a new article of manufacture a blank for fruit boxes consisting of a single piece of material and including a bottom section having oppositely disposed end sections formed integral therewith and of greater width than the bottom section, a side section formed integral with and extending laterally from one side only of each end section, end flaps formed integral with the side sections and provided with locking tabs, there being a substantially L shaped slot formed in each end section and arranged to receive the locking tabs, and shoulders formed on the end flaps for limiting the inward movement of said end flaps.

4. As a new article of manufacture, a blank for fruit boxes consisting of a single piece of material, substantially Z form in shape and including a bottom section having oppositely disposed end sections formed integral therewith and of greater width than the bottom section, side sections extending laterally from the bottom section, end flaps formed integral with the side section and provided with locking tabs, there being substantially L shaped slots formed in the end section and arranged to receive the locking tabs, and shoulders formed on the end flaps for limiting the inward movement of said end flaps.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ELMER W. CORNELL.

Witnesses:
F. W. WILSON,
ROBT. E. WALTER.