June 14, 1932. J. V. HOOD 1,862,855

COLLAPSIBLE BOX

Filed March 28, 1930

Fig. 1.

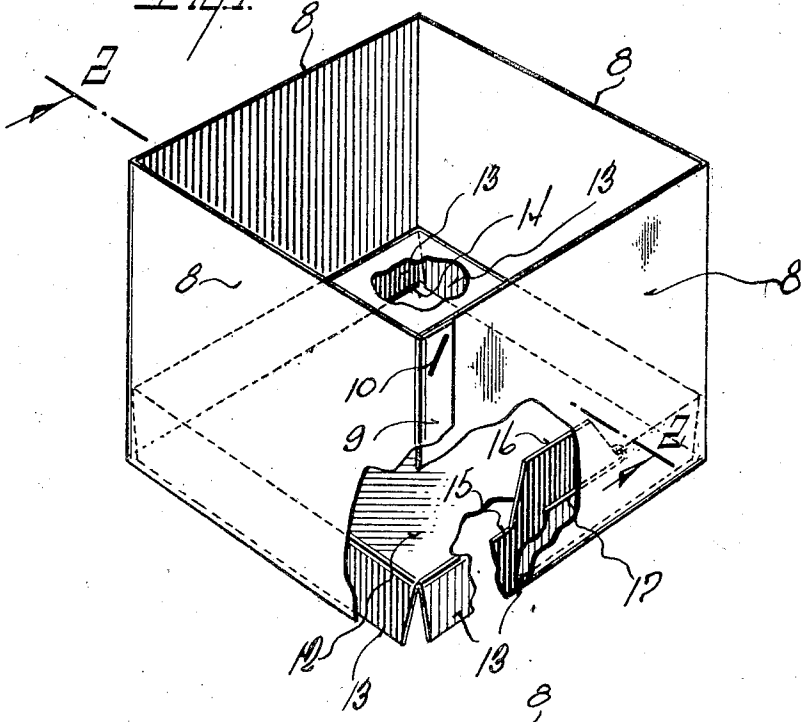


Fig. 2.

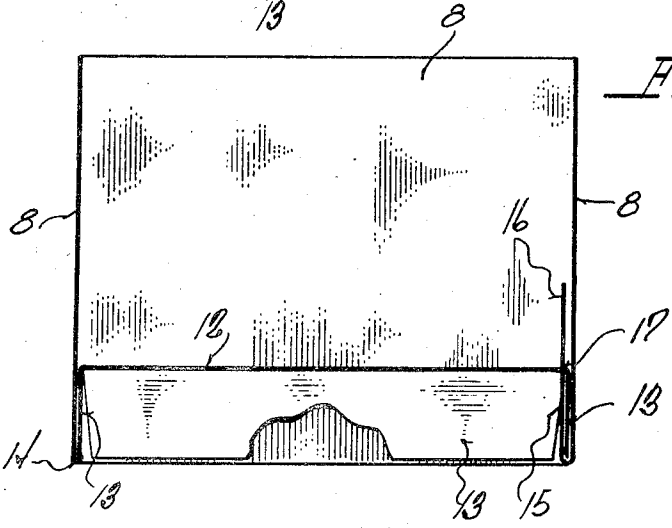
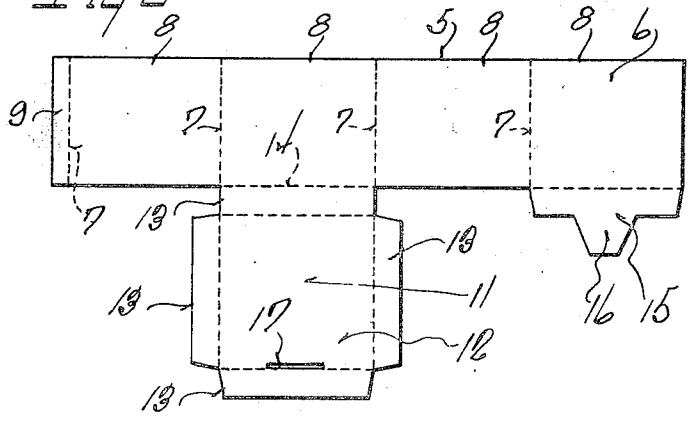


Fig. 3



Inventor

John Vincent Hood

By Ira Milton Jones

Attorney

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UNITED STATES PATENT OFFICE

JOHN VINCENT HOOD, OF RACINE, WISCONSIN

COLLAPSIBLE BOX

Application filed March 28, 1930. Serial No. 439,738.

This invention relates to certain new and useful improvements in collapsible boxes and refers more particularly to berry boxes.

It is an object of this invention to simplify the construction and reduce the cost of manufacture of such boxes without in any way detracting from their utility and durability.

Another object of this invention resides in the provision of a readily collapsible box of the character described which is so constructed that it may be quickly and easily set up for use.

And a further object of this invention resides in the provision of a collapsible box of the character described wherein the bottom forms an integral part of the collapsible sides and is readily movable to and from operative position.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a perspective view with portions broken away and in section of a berry box embodying my invention;

Figure 2 is a cross sectional view taken through Figure 1 on the plane of the line 2—2; and

Figure 3 is a plan view of the blank which is folded to form the box.

Referring now more particularly to the accompanying drawing in which numeral 5 designates a blank of card board or other suitable material having an elongated main portion 6 which is adapted to be folded at the places indicated by dotted lines 7 to form the side walls 8 of the box. One end of the main portion 6 of the blank has a narrow extension 9 which, as clearly illustrated in Figure 1, is secured to the opposite end of the blank, as at 10, to collapsibly connect the side walls.

The second section or side wall 8 inwardly from the extension 9 of the blank has a laterally projected portion 11 which is adapted to form the bottom 12 of the box. The portion 11 extends sufficiently far from the adjacent edge of the main portion 6 to provide the bottom per se with marginal flange portions 13 on all its sides, the marginal flange between the main body of the blank and the portion 11 being adapted to be folded along a line 14 in alignment with the lower edge of the blank to hingedly connect the portion 11 with the main portion.

When set up for use, the portion 11 is folded along the line 14 and the marginal flange portions 13 are folded downwardly, as clearly illustrated in Figures 1 and 2 so that the bottom 12 of the box is disposed inwardly from the lower edges of the side walls a distance substantially equal to the width of the marginal flange portions. It is noted that the lower edges of the side walls and the marginal flange portions are thus directly adjacent each other.

To maintain the bottom 12 in its proper position to form an open top box, the side wall which is formed by the section at the extreme right of the blank in Figure 3, and which is opposite the side wall with which the bottom is hingedly connected, is provided with an extension 15 whose major portion is of a width substantially equal to the marginal flange portions 13 and from which a medial tab 16 extends.

The extension 15 is adapted to be turned up to pass its tab 16 snugly through an aperture 17 formed in the bottom on the line of fold of the adjacent marginal flange portion. As clearly shown, the tab is substantially V shape to guide the same into the aperture.

In this manner the marginal flange portion 13 opposite the hinged connection of the bottom with its side wall is received between the extension 15 and the adjacent side wall 8 from which it projects, to thus rigidly support the free end of the bottom.

By extending the marginal flange portions

13 along the entire marginal edges of the bottom, the bottom is greatly strengthened and bending thereof either at the corners or at its medial portions is precluded.

When the box is knocked down for shipment, the bottom is disposed between the collapsible side walls so that the structure lies flat and occupies but small space.

From the foregoing description, taken in connection with the accompanying drawing, it will be readily apparent to those skilled in the art to which an invention of the character described appertains, that I provide a novel and simplified construction especially adapted for berry boxes, which permits shipping in a knocked down condition to conserve space and enable the box to be quickly and easily set up for use.

What I claim as my invention is:

1. A collapsible box comprising side walls, a bottom integrally connected, with one of the side walls and folded adjacent its connection with the said side wall to space the same inwardly from the lower edges of the side walls, a downwardly folded portion extending across each of the edges of the bottom, the bottom having an aperture adjacent the fold between the bottom and one of said portions, an upwardly directed extension on the side wall adjacent the aperture in the bottom to support the bottom, and a projection on said upwardly directed extension projecting through said aperture.

2. A collapsible box comprising side walls, a bottom, a downwardly folded portion extending across the entire length of each bottom marginal edge, one of said downwardly folded portions having its lower edge integral with the adjacent side wall whereby the bottom is movable to and from a position within the side walls and said downwardly folded portions to strengthen the bottom and prevent bending thereof, the bottom having a slot therein adjacent the side wall opposite that with which the bottom is integrally connected, an upwardly directed extension formed on the side wall adjacent the slot, and a projection carried by said upwardly directed extension adapted to be passed through the slot whereby the bottom is supported by the upwardly directed extension.

3. A collapsible box comprising connected collapsible side walls, a bottom received within the side walls and having a down-turned marginal flange portion extended across the entire length of each of its marginal edges, the lower edges of the side walls and the down-turned marginal flange portions being adjacent and one pair of adjacent lower edges being hingedly connected, an up-turned marginal extension on the lower edge of the side wall opposite the hinged connection and between which and the said side wall the adjacent down-turned marginal flange portion is received and supported, and a tab extended from the inner edge of the up-turned marginal extension and fitting in a slot formed in the bottom to frictionally hold the bottom in operative position.

4. A collapsible box comprising side walls, a bottom, a downwardly folded portion extending across one edge of said bottom and integrally connected with said bottom and with one of said side walls, a second downwardly folded portion extending across the edge of said bottom opposite from said last named edge, said bottom being provided with a slot in the side along the edge thereof adjacent said last named downwardly folded portion, an upwardly directed extension formed on the side wall adjacent the slot and a projection carried by said upwardly directed extension adapted to pass through the slot in the bottom whereby the bottom is supported by the upwardly directed extension.

5. A collapsible box comprising side walls, a bottom, a downwardly folded portion extending across one edge of said bottom and integrally connected with said bottom and one of said side walls, a second downwardly folded portion extending across another edge of said bottom, said bottom being provided with a slot in the side along the edge thereof adjacent said last named downwardly folded portion, an upwardly directed extension formed on the side wall adjacent the slot and a projection carried by said upwardly directed extension adapted to pass through the slot in the bottom whereby the bottom is supported by the upwardly directed extension.

In testimony whereof I have hereunto affixed my signature.

JOHN VINCENT HOOD.