April 10, 1928. 1,665,359

F. G. HAAS

BERRY BOX

Filed Feb. 14, 1927

Fig. 1

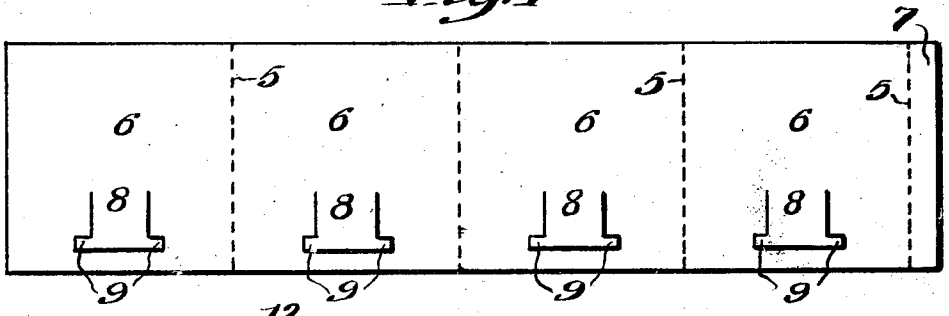



Fig. 2

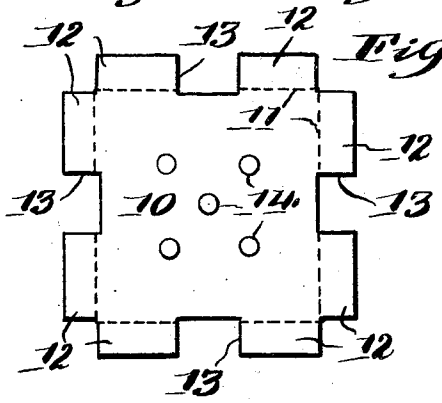



Fig. 3

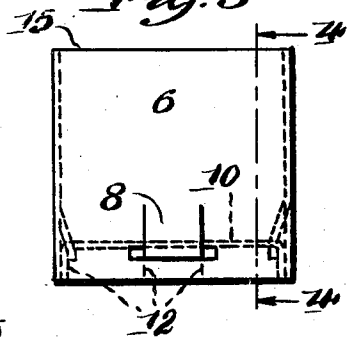
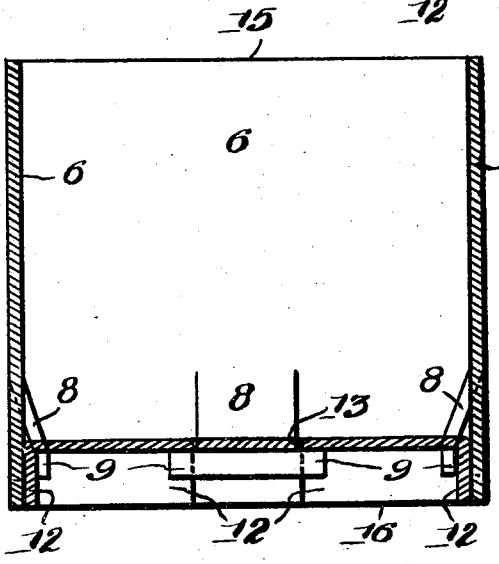



Fig. 4




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Patented Apr. 10, 1928. 1,665,359

# UNITED STATES PATENT OFFICE.

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## BERRY BOX.

Application filed February 14, 1927. Serial No. 168,028.

This invention relates to boxes of the inexpensive type used in dispensing and transporting berries and other fresh food stuffs, and particularly to such a box adapted to be constructed from paper board or other foldable sheet material.

It is the object of this invention to provide a novel and unusually strong box of this kind, which is inexpensive and adapted to facilitate assembling and securing in box form. Other objects will appear and be pointed out in the following specification and claims.

In the accompanying drawings, which illustrate the best form of my device at present known to me, Figure 1 is a plan view of the blank forming the four side walls of the box; Fig. 2 is a plan view of the blank constituting the bottom of the box; Fig. 3 is a side elevation of the box assembled and Fig. 4 is a typical vertical section taken on the line 4—4 of Fig. 3.

As shown in Fig. 1, the main blank consists of a rectangular sheet of paper board or other suitable sheet material adapted to be folded. The blank is creased along normally vertical lines 5 to form four side walls 6. At one end, an integral flap 7 is formed to overlap and be secured to the side 6 at opposite end of the blank. Each of the sides 6 has a tongue 8, which is integral with the side and adapted to be extended obliquely inward and downward. Laterally projecting ears 9 on each tongue 8 are adapted to support the bottom of the box as hereinafter described. As shown in Fig. 2, the bottom 10 of the box is also formed from foldable sheet material and is creased along the dotted lines 11, to permit folding of the series of flanges 12 at right angles to the bottom proper, a pair of such flanges being formed on each of the four side edges. The flanges of each pair are separated by cutting an opening 13, which extends in from a side edge of the blank.

The tongues 8 are adapted to extend into the openings 13. The bottom 10 may be perforated, as indicated at 14 for ventilation, and where the box is made from paper board, the material is treated with a moisture resistant substance, such as paraffin.

To assemble the box, the main body blank is folded along the lines 5 to tubular form and the end flap 7 is secured along the margin of the adjacent side 6. This fastening may be made with a suitable adhesive, such as a silicate, or by securing a tape over the joint. The other normally vertical corners of the box may also be reinforced by securing strips of cloth or tough paper thereto. Now the bottom 10 of the box is folded along the lines 11, so that the several flanges 12 extend downward, and the bottom is placed within the tubular structure formed by the sides 6 by inserting it into the top 15 of the box. Before pressing the bottom 10 down within the box, the tongues 8 are bent obliquely inward to substantially the position shown in Fig. 4. Now the bottom 10 is pressed down through the box to the position shown in Fig. 4. The inwardly bent tongues 8 are passed into the openings 13 so that the ears 9 interlock with the flanges 12 at each side of the bottom. Downward movement of the bottom is stopped by the ears 9, which project beyond the side edges of the openings 13.

It will be noted that the flanges 12 now extend in engagement with the inner surfaces of the sides 6, and the lower edges of said flanges are flush with the lower edges 16 of the sides 6. Thus, when the box rests upon the lower edges of the sides 6, the bottom 10 is supported upon the flanges 12. When the box is raised from the support, the bottom 10 and contents are suspended by the tongues 8. These tongues 8 also constitute means for preventing outward bulging of the sides 6 when the box is filled. It will thus be evident that the sides and bottom are securely fastened together in the completed box and the parts of the sides projecting below the bottom proper are reinforced by the flanges 12 on the bottom. The boxes are preferably prepared for shipping with the body blanks separate from the bottom panels and the body secured in tubular form and collapsed so as to lie flat. The operation of assembling the boxes is performed immediately before they are filled, and this operation is facilitated by my arrangement which eliminates all auxiliary or separate fastenings between the bottoms and sides. Obviously, the operation of folding the flanges 12 and extending the tongues 9 into interlocking position in the openings 13 may be performed quickly and easily. It will further be noted that the box has the advantages of being strong and at the same time requiring a minimum of sheet material in its construction and is, therefore, of unusually inexpensive design. Ample strength

is given the box by reason of the interlocking of the ears 12 with the lower surface of the panel 10 and inner surface of the flanges 12, whereby the bottom is positively connected with each side of the box.

Having described my invention what I claim as new and desire to protect by Letters Patent is:

1. In a box formed from foldable sheet material, the combination with four side walls, a rectangular bottom panel fitting within the four walls and having a downwardly projecting flange on each side edge, a tongue secured to a side wall above said bottom panel and projecting downward beneath said bottom panel, said bottom panel being formed with an opening to receive said tongue and means on said tongue beneath said bottom panel to support the same.

2. In a box formed from foldable sheet material, the combination with four side walls, a rectangular bottom panel fitting within the four walls and having a downwardly projecting flange disposed on each side edge in parallel relation to the adjacent side wall, a tongue formed integral with a side wall above said bottom panel and projecting beneath said bottom panel, said bottom panel having an opening to receive said tongue and laterally projecting ears formed on said tongue beneath said panel to support the same.

3. In a box formed from foldable sheet material, the combination with four side walls, a rectangular bottom panel offset upward from the lower edges of said walls and having a downwardly projecting flange on each side edge adapted to support said panel, a tongue secured to each side wall above said bottom panel and projecting downward beneath said panel, said bottom being formed with openings to receive said tongues and interlocking means disposed on each of said tongues to engage the inner surfaces of said flanges and bottom surface of said panel and thereby positively connect the bottom panel to each of said side walls.

4. The combination with four side walls formed from flexible sheet material, a bottom panel fitting within the box and offset upward from the lower edges of said side walls, flanges depending from each side edge of said bottom panel and having their lower edges substantially flush with the lower edges of said side walls, a tongue offset inward from each side wall and secured thereto above said bottom panel, said bottom panel being formed with openings to receive said tongues and said tongues being formed to project downward through said openings and projections on said tongues adapted to positively interlock with said bottom panel.

5. The combination with four side walls formed from flexible sheet material, a bottom panel fitting within the box and offset upward from the lower edges of said side walls, a flange on each side edge of said bottom panel, a tongue secured to each side wall above said bottom panel and offset obliquely inward from each side wall, said bottom panel being formed with openings to receive said tongues and said tongues being disposed to project through said openings and means on said tongues adapted to interlock with said bottom panel and thereby support the same.

In testimony whereof, I have hereunto signed my name to this specification.

FERDINAND G. HAAS.