Sept. 10, 1946. B. M. WILLIAMS 2,407,463

CONTAINER

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Fig. 1.

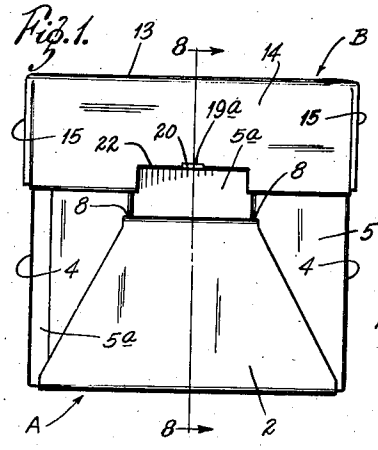


Fig. 2.

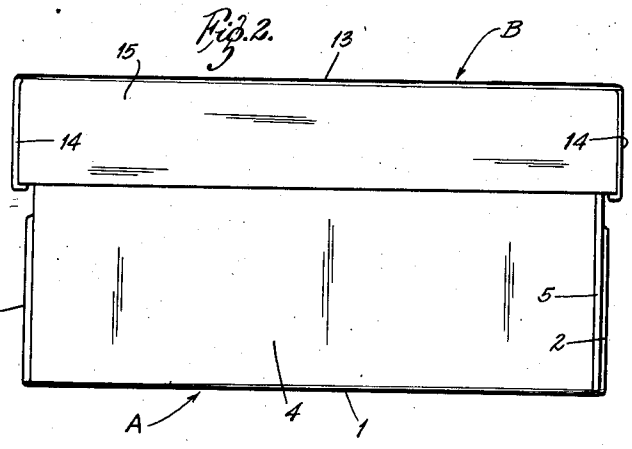


Fig. 3.

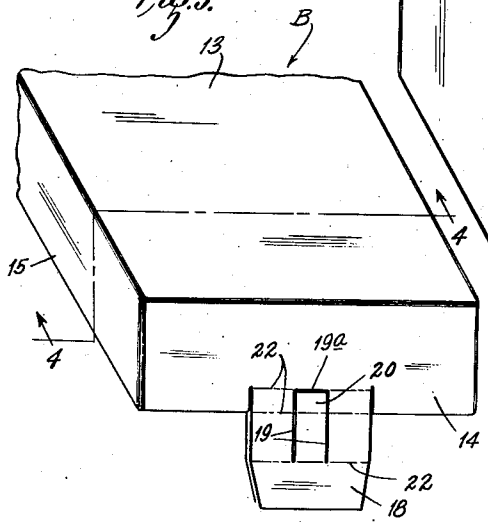


Fig. 4.

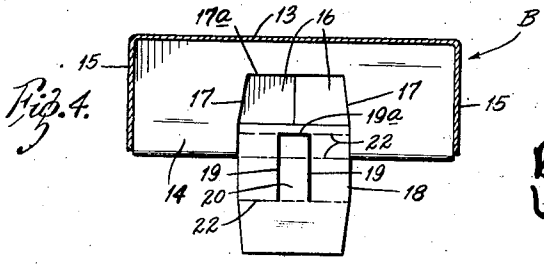
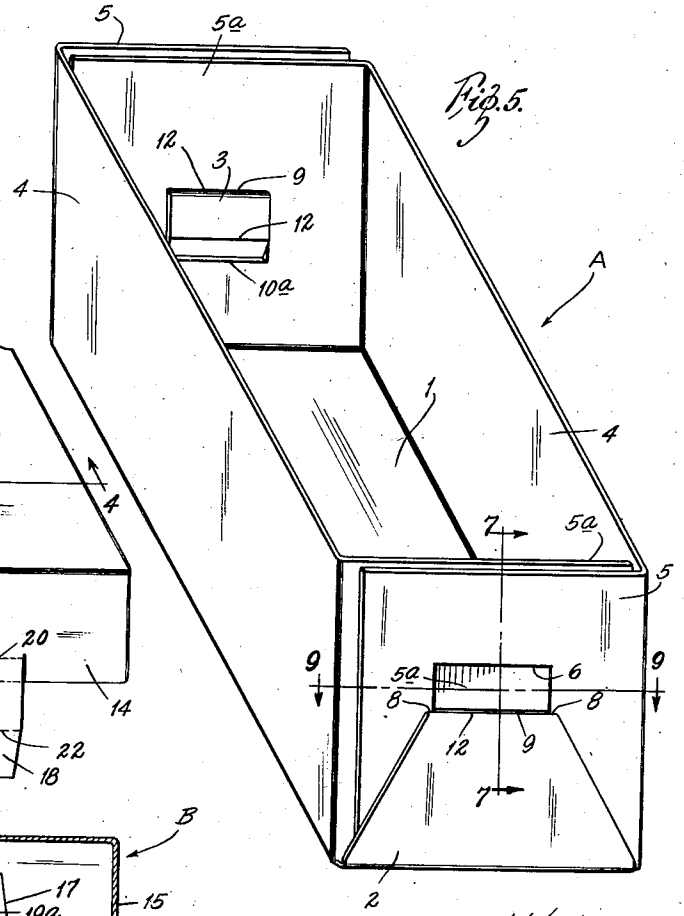


Fig. 5.



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Fig. 6.

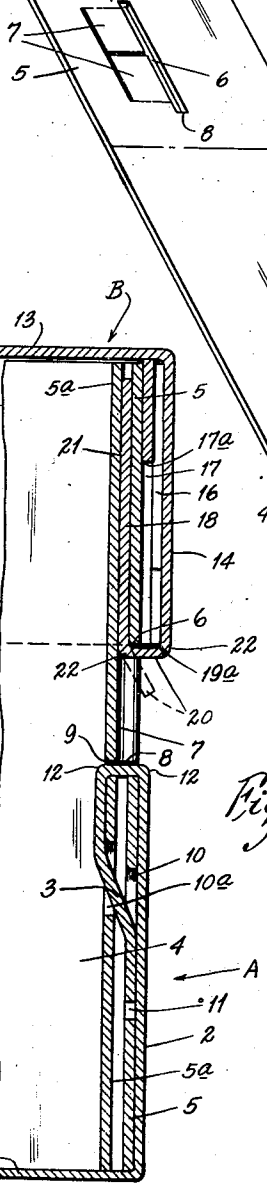
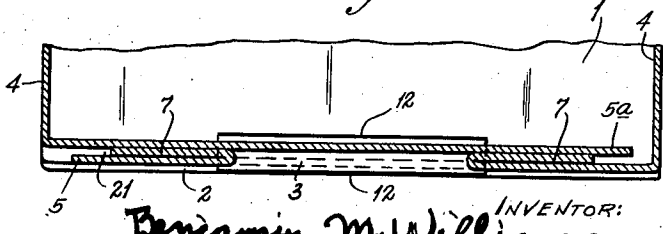


Fig. 7.

Fig. 8.

Fig. 9.



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CONTAINER

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Application October 16, 1944, Serial No. 558,867

6 Claims. (Cl. 229—45)

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This invention relates to containers, particularly fruit and vegetable shipping cartons of the kind having a body with hand holes and a slip cover with locking tongues that are bent inwardly through said hand holes and thence upwardly around the upper edges thereof between two plies of said body. The principal objects of the present invention are to provide for quickly and easily inserting the cover locking tongues between and withdrawing them from the two plies of the body; to provide fixed and permanent closures back of the hand holes to protect the fruit from light and from injury when the fingers are inserted in said hand holes in handling the carton and in locking and unlocking said cover locking tongues; to provide for increasing the space and purchase area for the fingers along the bent portions of the locked cover tongues; and to obtain other advantages hereinafter appearing. The invention consists in the carton and in the construction, combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification and wherein like symbols refer to like parts wherever they occur,

Fig. 1 is an end view of a carton embodying my invention,

Fig. 2 is a side elevational view of said carton,

Fig. 3 is a fragmentary perspective view of the slip cover of the carton,

Fig. 4 is a vertical cross-sectional view through the slip cover on the line 4—4 in Fig. 3,

Fig. 5 is a perspective view of the body of the carton,

Fig. 6 is a perspective view, showing the body of the carton in the process of erection,

Fig. 7 is an enlarged vertical cross-sectional view through one end of the body of the carton on the line 7—7 in Fig. 5,

Fig. 8 is an enlarged vertical cross-section through one end of the carton on the line 8—8 in Fig. 1; and

Fig. 9 is an enlarged fragmentary horizontal sectional view on the line 9—9 in Fig. 5.

In the accompanying drawings, my invention is shown embodied in a fruit or vegetable shipping carton comprising a body A and a slip cover B therefor, both made of corrugated board, fiberboard or other bendable material. The body A preferably comprises a bottom wall or panel 1, with outwardly tapering end flaps 2 that terminate in locking tongues or tabs 3 and side walls or panels 4 with end flaps 5 and 5a, respectively, that are overlapped to form two-ply end walls.

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Each of the outermost end flaps 5 has a rectangular hand hole 6 therein with flaps 7 along its vertical side edges that are bent to lie between the overlapped end flaps 5 and 5a and thus space them apart. As shown in the drawings, the side flaps 7 of each hand hole 6 terminate short of the lower edge thereof and the portion of the hand hole below said side flaps is notched, as at 8, to increase the width of said portion to that of the locking tongue 3 of the adjacent end flap 2 of the body A.

Each of the innermost end flaps 5a has a horizontally elongated slot 9 therein which registers with the notched lower portion 8 only of the hand hole 6 in the outermost end flap 5; that is, the horizontal slot 9 is of a length corresponding to the length of the notched lower portion of the hand hole 6 and is disposed with its lower edge flush with the lower edge of said hand hole and with its upper edge flush with the upper edges of the notches 8. The overlapped end flaps 5 and 5a are also provided with registering rectangular openings 10 and 10a, respectively, of a length corresponding substantially to the width of the locking tongues 3 of the end flaps 2 of the body A. As shown in the drawings, the registering openings 10 and 10a are disposed with their upper edges in substantial flush alinement; but the openings 10a in the innermost end flap 5a is of less depth than the opening 10 in the outermost end flap 5, whereby said innermost end flap covers or masks the lower half of the opening 10 in said outermost end flap.

The body A is set up or erected by folding the side walls 4 upwardly into vertical position and by folding the end flaps 5 over the end flaps 5a, with the side flaps 7 of the hand holes 6 in the outermost end flaps 5 folded against the inner faces thereof. The overlapped end flaps 5 and 5a are then secured together by bending the end flaps 2 upwardly alongside the outermost end flaps 5 over the openings 10 therein and then pushing the locking tongues 3 at the free ends of said end flaps through the notched lower portions 8 of the hand holes 6 in said outermost end flaps and through the slots 9 in the innermost end flaps 5a. The locking tongues 3 are then bent downwardly inside the body A alongside the innermost end flaps 5a, after which the end portions of said locking tongues are pushed through the openings 10a in the innermost end flap into the upwardly opening retaining pockets 11 formed in the openings 10 below the level of the bottom edges of the openings 10a. As shown in the drawings, the locking tongues 3 are scored

transversely, as at 12, so that they may be readily bent and directed through and around the notched lower portions 8 of the hand holes 6 and tucked into the pockets 11.

The slip cover B preferably comprises a top wall or panel 13 having end flaps 14 and side wall panels 15 with end flaps 16. At each end of the cover, the two end flaps 16 are bent into endwise abutting relation and the end flap 14 is bent downwardly along the outer faces of the two end flaps 16 and thence upwardly around the lower edges thereof and alongside the inner faces thereof into edgewise abutting relation to the top panel 13. Each of the folded end flaps 14 has two vertical slits 17 cut therein that extend from the outer fold of said flap to a point adjacent to the upper edge of the inner fold thereof where they are connected by a cross slit 17a to provide a locking tongue 18 which may be bent downwardly and outwardly into vertical alinement with said outer fold. As shown in the drawings, each of the locking tongues 18 has two vertical slits 19 cut therein that are connected along the line of connection of said tongue with the folded end flap 14 by a cross slit 19a so as to provide a pull tab 20 for said tongue.

After the body A is packed with fruit, the cover B is slipped over said body with the locking tongues 18 of the cover extending downwardly therefrom across the hand holes 6. The locking tongues 18 are then bent inwardly by the fingers into the hand holes 6 and slip upwardly along the innermost end closure flaps 5a and bent around the lower edges of the abutting end flaps 16 of the cover and the inner fold of the folded end flaps 14 thereof and the upper edges of said hand holes and then inserted upwardly into the clear spaces or pockets 21 provided therefor between the overlapped end flaps 5 and 5a by the double back side edge tabs 7 of said hand holes, this tucking operation being facilitated by prescoring the locking tongues transversely along score lines 22. When it is desired to open the carton for inspection or removal of the contents thereof, the exposed free outer ends of the pull tabs 20 of the tucked in locking tongues 18 are grasped by the fingers and pulled downwardly and outwardly, thereby pulling said tongues from their tucked in position in the spaces 21 between the inner and outer plies of the end walls of the body and thence outwardly through the hand holes 6 in the outer plies thereof, thereby permitting the cover to be removed from the body.

The body A and cover B may be shipped in knockdown form and readily erected for service, the registering openings 10 and 10a in the two-ply end walls of the body are concealed by the end flaps 2 thereof; and the overlapped end wall flaps 5 and 5a are securely held together by the locking tongues 3, which are bent around the lower edges of the hand holes 6 in the outermost end wall flaps 5 and are tucked in the pockets 21. The end flaps 2 are held down on the bottom edges of the hand holes 6 by the notches 8 in the lower corners thereof and by the upper edges of the flap receiving slots 9 in the innermost end flap 5a of the body. The hand holes 6 in the outermost end flaps 5 are covered by the innermost end flaps 5a, which form fixed and permanent closures back of said hand holes to protect the fruit from light and from injury when the fingers are inserted in the hand holes to handle the carton and to lock and unlock the cover. The portions of the cover locking tongues 18 that extend beneath the end walls of the cover and the upper edges of the

hand holes 6 provide wide flat gripping areas for the fingers; and the doubled back side edge tabs 7 of said hand holes provide clear spaces thereabove which permit said locking tongues to be quickly tucked between the overlapped end flaps 5 and 5a and withdrawn therefrom.

Obviously, the hereinbefore described carton construction admits of considerable modification without departing from the invention. Therefore, I do not wish to be limited to the precise construction shown and described.

What I claim is:

1. A carton comprising a body having flaps that are overlapped and secured together to form end walls, said end walls having hand holes in the outermost flaps thereof, means for spacing the overlapped flaps of the end walls apart to provide clear spaces therebetween above said hand holes, and a cover having locking tongues depending therefrom that are bent upwardly around the upper edges of said hand holes and are inserted into the clear spaces located thereabove between said overlapped flaps, said spacing means comprising tabs located along the edges of said hand holes and bent to lie between said overlapped flaps.

2. A carton comprising a body having side panels with end flaps that are overlapped and secured together to form end walls, said end walls having hand holes in the outermost flaps only thereof, means for spacing the overlapped flaps of the end walls apart to provide clear spaces therebetween above the hand holes in the outermost flaps, and a cover having locking tongues depending therefrom that are bent upwardly around the upper edges of the hand holes and into the clear spaces between said overlapped flaps, said means comprising tabs located along the edges of said hand holes and bent to lie between said overlapped flaps.

3. A carton comprising a body having side panels with flaps that are overlapped and secured together to form end walls, said end walls having hand holes in the outermost flaps only thereof, means for spacing said overlapped end wall flaps apart to provide clear spaces therebetween above the hand holes in the outermost flaps, and a cover having locking tongues depending therefrom that are bent upwardly around the upper edges of the hand holes in the outermost flaps and are inserted into the clear spaces between the overlapped flaps, said means comprising flaps along the side edges of said hand holes that are bent to lie between said overlapped flaps.

4. A carton comprising a body having side panels with flaps that are overlapped and secured together to form two-ply end walls, the outermost flaps only having hand holes therethrough and the innermost flaps constituting permanent rigid closures for said hand holes, the outermost end flaps of said end walls having tabs along the edges of the hand holes therein that are bent to lie between the overlapped flaps to provide clear spaces therebetween above said hand holes, and a cover having locking tongues depending therefrom that are bent upwardly around the upper edges of said hand holes and into the clear spaces between said overlapped flaps above said hand holes.

5. A carton comprising a body having side panels with end flaps that are overlapped to form end walls, said end walls having hand holes in the outermost flaps only thereof, whereby the innermost flaps constitute permanent rigid closures back of said hand holes, and a cover having three-

ply end walls and locking tongues depending from the outermost plies thereof, said locking tongues being bent inwardly beneath the two remaining plies of said end walls of said cover and the upper edges of said hand holes to provide relatively wide flat purchase areas for the fingers and thence upwardly between said overlapped flaps, said outermost flaps having tabs along the vertical side edges of the hand holes therein that are bent to lie between said overlapped flaps and provide clear spaces therebetween for the upwardly bent portions of said locking tongues.

6. A carton comprising a body having side panels with end flaps that are overlapped to form end walls, said end walls having hand holes in the outermost flaps only thereof, whereby the innermost flaps constitute permanent rigid closures

back of said hand holes, and a cover having three-ply end walls and locking tongues depending from the outermost plies thereof, said locking tongues being bent inwardly beneath the two remaining plies of said end walls of said cover and the upper edges of said hand holes to provide relatively wide flat purchase areas for the fingers and thence upwardly between said overlapped flaps, said outermost flaps having tabs along the vertical side edges of the hand holes therein that are bent to lie between said overlapped flaps and provide clear spaces therebetween for the upwardly bent portions of said locking tongues, said locking tongues having pull tabs depending from the upwardly bent portions thereof for withdrawing said portions from said spaces.

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