Jan. 10, 1956 H. C. REESER 2,730,291

SHIPPING CONTAINER

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3 Sheets-Sheet 1

Fig. 1.

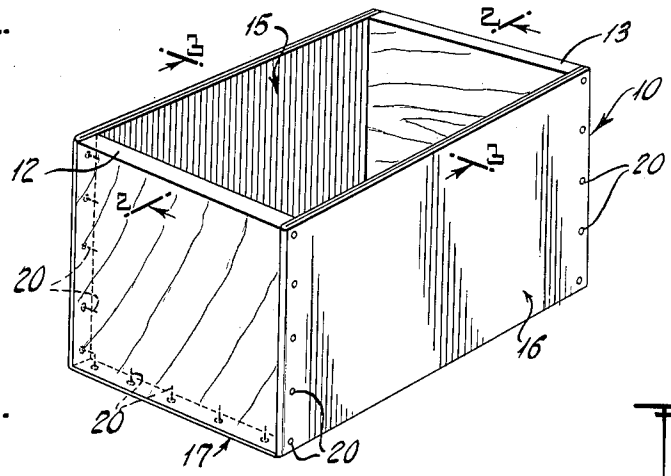


Fig. 2.

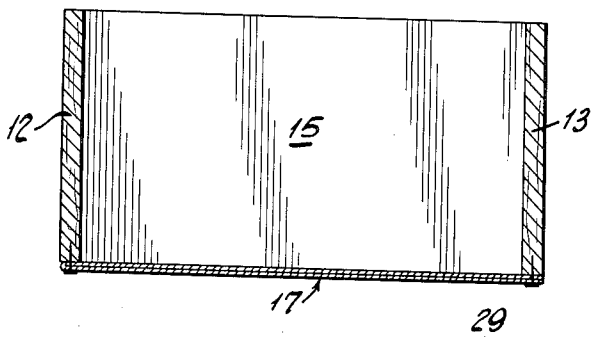


Fig. 3.

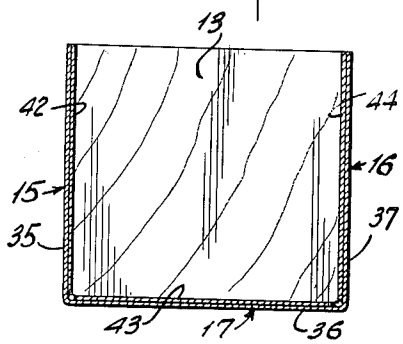


Fig. 5.

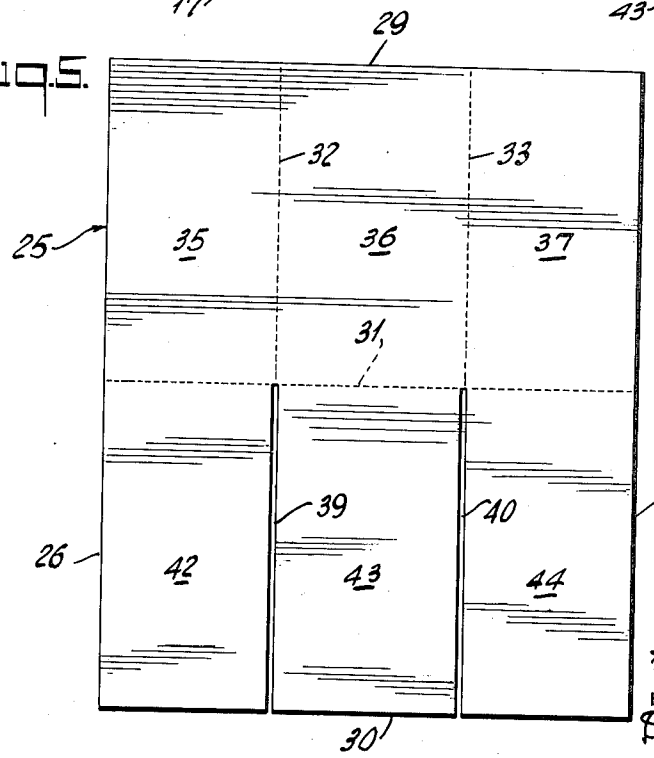
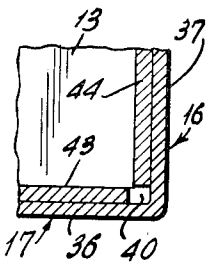


Fig. 4.



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Fig. 6.

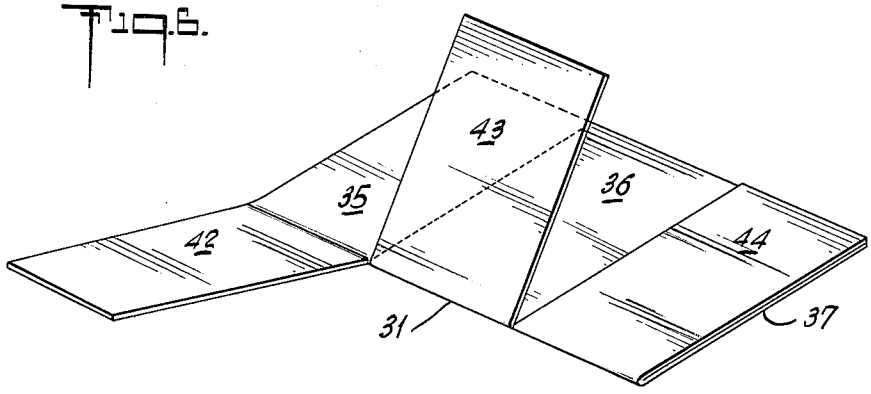


Fig. 7.

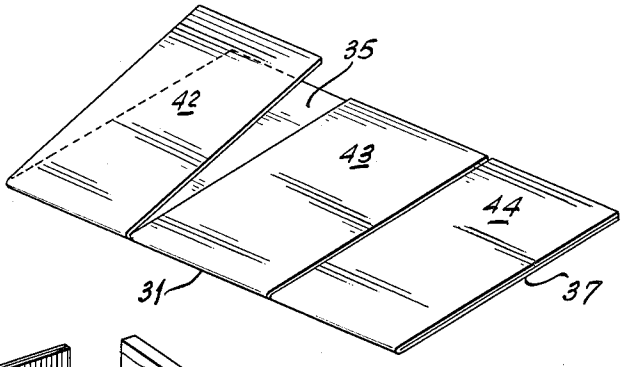


Fig. 8.

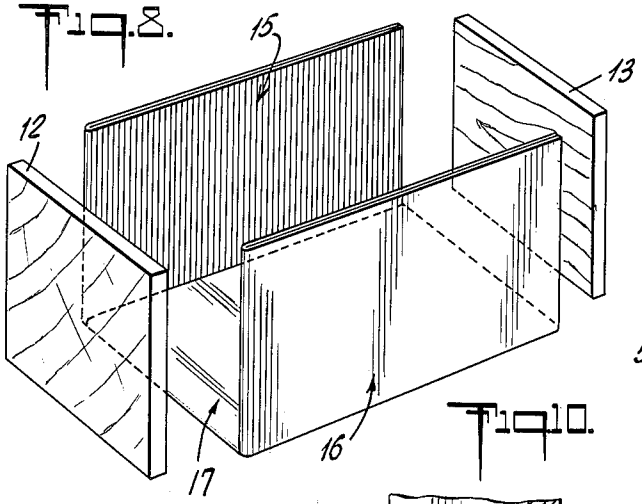


Fig. 10.

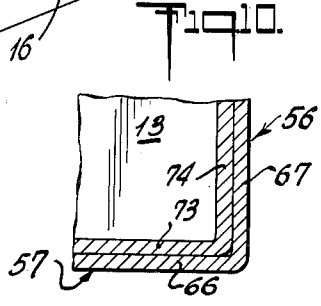
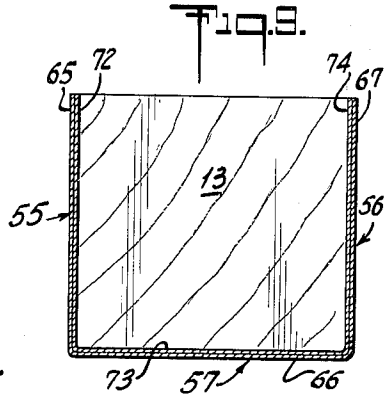


Fig. 9.



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Fig 11.

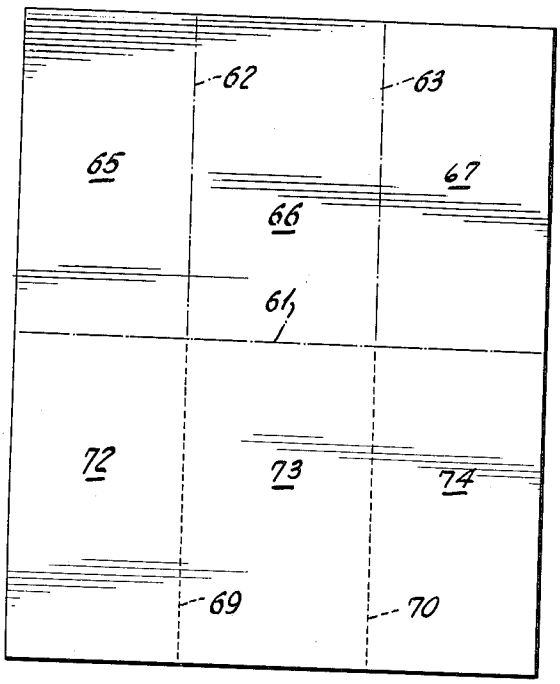


Fig 12.

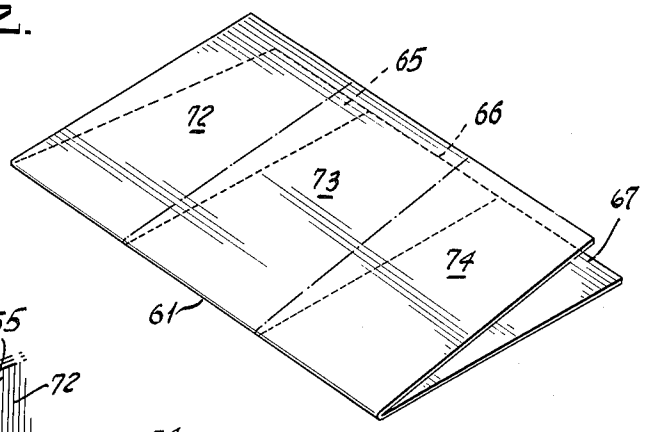
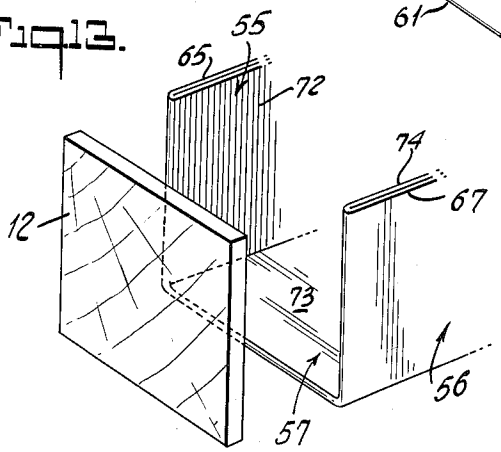


Fig 13.



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SHIPPING CONTAINER

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Application March 25, 1949, Serial No. 83,391

1 Claim. (Cl. 229—23)

This invention relates to containers and more particularly to containers formed largely of fiber board, either corrugated or solid, and particularly adapted as containers for shipping fruits, vegetables or other perishable commodities.

The principal object of the invention is to provide a shipping container or box of the character above mentioned, which will be sufficiently sturdy in its construction to withstand the hard usage to which it will normally be subjected in service and which will adequately protect fruits, vegetables or other contents from damage when packed and shipped therein.

Another object of the invention is to provide a shipping box or container of this character which is of simple construction, so that it may be readily assembled from its component parts at a relatively low cost.

These and other objects and advantages of the invention will be apparent from the following more detailed description, and from the accompanying drawings in which:

Fig. 1 is a view in perspective of a box constructed according to the invention;

Fig. 2 is a view in cross-section, taken longitudinally of the box along line 2—2 of Fig. 1;

Fig. 3 is a view in cross-section taken, transversely of the box along line 3—3 of Fig. 1;

Fig. 4 is an enlarged fragmentary view in cross-section, showing in greater detail one of the side corners at the lower end of the box;

Fig. 5 is a plan view of a blank from which the sides and the bottom of the box may be formed;

Figs. 6 and 7 are views in perspective, showing the blank of Fig. 5 partially bent to form the sides and bottom of the box;

Fig. 8 is a view in perspective showing the blank of Fig. 5 bent into shape ready to be assembled with the ends of the box;

Fig. 9 is a view in transverse cross-section, showing another embodiment of the invention;

Fig. 10 is an enlarged fragmentary view in cross-section, showing one of the side corners at the lower end of the box of Fig. 9;

Fig. 11 is a plan view of a blank for forming the sides and bottom of the box shown in Figs. 9 and 10;

Fig. 12 is a view showing the blank of Fig. 11 partially bent; and

Fig. 13 is a partial view in perspective, showing one end of the completely folded or bent blank of Figs. 11–12 ready to be assembled with the ends of the box.

The container or box of my invention consists essentially of wooden end walls and a one piece fiberboard member constituting the side walls and the bottom wall of the box. This fiberboard member according to the invention is constructed in such a manner that the side and the bottom of the box will each be of double wall thickness.

Referring now to Figs. 1–4 of the drawings, the container, indicated generally by the numeral 10, consists of rectangular wooden end members 12 and 13 and fiberboard side walls 15, 16 and bottom wall 17. As indicated, it is a feature of the invention that the walls 15—16 and bottom wall 17 are formed from a single piece of corrugated fiberboard, solid fiberboard or the like, and are each of double wall construction. In constructing the box, the wooden end walls 12, 13 are assembled with the single piece member constituting the sides and bottom of the box so as to position the wooden ends interiorly of the sidewalls and bottom of the box at the opposite ends thereof, and the side walls and the bottom wall are secured to the corresponding edges of the wooden end members 12, 13 as by nails 20 or the like driven into the said edges of the end members.

When the completed box has been packed with fruits, vegetables or the like to be shipped, it may be closed with a wood slat top such as is conventionally used for produce containers.

Referring now to Figs. 5, 6 and 7 of the drawings, the numeral 25 indicates generally a blank of fiberboard formed so as to provide the side walls and the bottom wall of the box shown in Figs. 1–4. This blank consists of a rectangular piece of the fiberboard of a length equal approximately to twice the length of the box to be formed therewith, and of a width equal approximately to the sum of the width of the box and twice its height. This blank is scored transversely midway of its length as indicated at 31, this score being parallel to the transverse edges 29, 30 and extending completely from one side edge 26 to the opposite side edge 27 of the blank. This score line 31 thus divides the blank into two equal halves.

In one of these halves, such as that between the score line 31 and the edge 29, there is provided with a pair of spaced longitudinal scores 32, 33 parallel to each other and to the side edges 26—27 of the blank, the scores 32, 33 being formed so as to permit the board to be bent in the same direction as afforded by the transverse score 31. The scores 32, 33 are spaced apart a distance approximately equal to the width of the end members 12, 13 and are located inwardly of the side edges 26, 27, respectively, at equal distances approximately equal to the height of the end members 12, 13. The half of the blank in which the scores 32—33 are provided thus consists of sections 35, 36 and 37, each of a length corresponding to the length of the box, the side sections 35, 37 being of a width corresponding to the height of the box and the central section 36 being of a width corresponding approximately to the width of the box.

The other half of the blank is provided with a pair of longitudinal slots 39, 40 parallel to one another and extending from transverse score 40 to the opposite end 30 of the blank, in alignment with the longitudinal scores 32, 33. This half of the blank is thus provided with a central panel 43 equal in length to, and slightly less in width than, the section 36, and panels 42, 44 each equal in length to, and slightly less in width than, the sections 35, 37.

To assemble the blank of Fig. 5 with the end walls 12, 13 in constructing the box, the blank is first doubled over on itself along the transverse score 31 in such a manner that the panels 42, 43, 44 respectively overlie the sections 35, 36, 37 as shown in Figs. 6 and 7; thereupon the overlying members 35, 42 and the overlying members 37, 44 are bent upwardly along each of the now registering scores and slots 32, 39 and 33, 40 into a position at right angles to the overlying members 36, 43. The cross-sectionally U-shaped double wall shell thus formed from the fiberboard blank may now be secured to the wooden end members 12, 13, by bringing the latter, as shown in Fig. 8, into position on the interior of the shell at the ends thereof,

and driving fasteners such as nails **20** through the shell and into the side edges and bottom edge of the end members.

In Figs. 9 to 13 there is illustrated another embodiment of the invention. This embodiment differs from the embodiment previously described in that the side walls **55**, **56** and the bottom wall **57** of the box are formed from a blank more particularly illustrated in Figs. 11 and 12. In this instance, the blank is provided with a transverse score **61** and parallel longitudinal scores **62**, **63** corresponding to the transverse score **31** and longitudinal scores **32**, **33** of the blank shown in Fig. 5. However, instead of forming slots as shown at **39**, **40** in Fig. 5, the blank of Fig. 11 is formed with parallel longitudinal scores **69**, **70** in alignment, respectively, with the scores **62**, **63**. The scores **69**, **70** are, moreover formed reversely to the scores **61**, **62**, **63** i. e. on the opposite face of the blank. Thus, this form of blank, when ready for use may be doubled over on itself along the transverse score **61** so that the sections **72**, **73**, **74** overlie, respectively, the sections **65**, **66**, **67**; whereupon the overlying sections **72**, **65** and **74**, **67** may be bent upwardly along the scores **62**, **69** and **63**, **70**, respectively, forming a cross-sectionally U-shaped double wall shell ready to be secured, at its opposite ends, to the end members **12**, **13**.

I claim:

A shipping box of the character described, comprising a pair of wooden ends and a fiberboard member secured to the bottom and the side edges of said wooden ends to provide the bottom and side walls of said box, said member consisting of a single integral sheet folded upon itself along a central transverse crease line coincident with the edges of one of said wooden ends to provide mutually coextensive overlying portions having their free ends in substantial alignment and coincident with the edges of the other of said pair of wooden ends said overlying portions contacting each other at all points, thereby providing a double layer of material over essentially all of said bottom and side walls.

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