Dec. 19, 1939. O. O. NICKERSON 2,184,258

SHIPPING CONTAINER

Filed Feb. 12, 1938

Fig. 1.

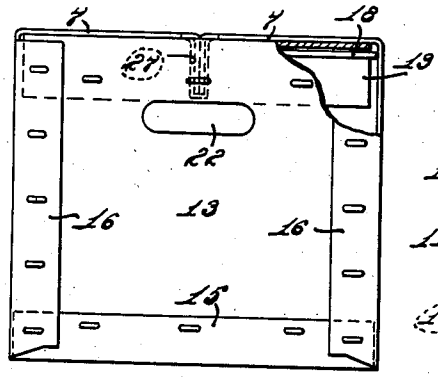


Fig. 2.

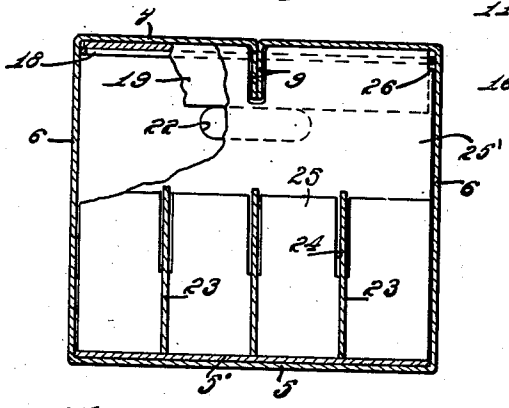


Fig. 3.

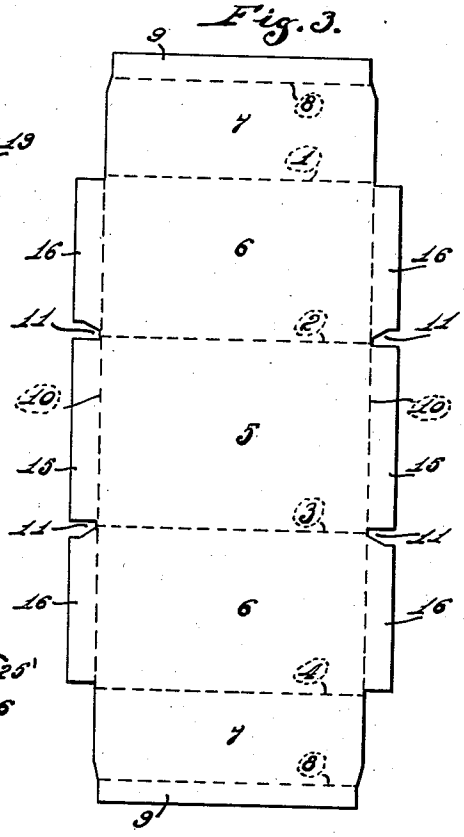


Fig. 4.

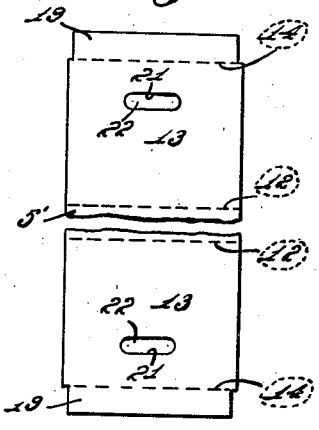
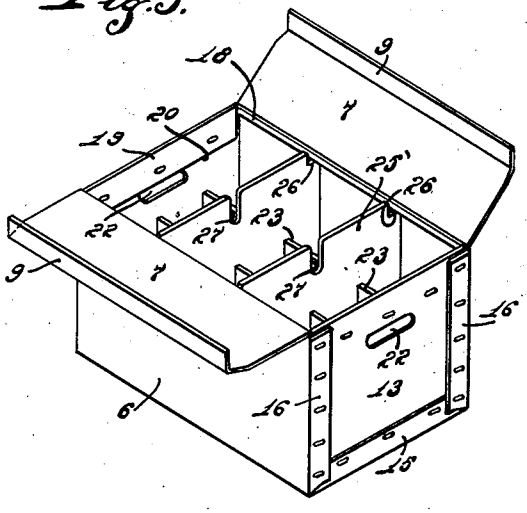


Fig. 5.



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Patented Dec. 19, 1939 2,184,258

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2,184,258

SHIPPING CONTAINER

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Application February 12, 1938, Serial No. 190,200

5 Claims. (Cl. 229—23)

My invention relates to improvements in shipping containers or packing cases and the like and is primarily directed towards improvements in containers for bottles, such for instance, as bottles of beer and other beverages.

It has for one of its objects that of providing a shipping container formed of fiber board or corrugated board which shall be extremely rigid in construction and which shall, at the same time, be of such construction as to permit of the container being manufactured at an extremely low cost and from preformed blanks which may be shipped in knocked-down condition.

A further object of my invention is the provision of a container having the above characteristics wherein the danger of the side panels becoming pulled out or torn out while the container is being carried shall be prevented, wherein the bottom panel shall be materially strengthened, and wherein the container as a whole may be more rigidly and strongly constructed.

For the purpose of disclosing my invention, I have illustrated an embodiment thereof in the accompanying drawing, in which:

Fig. 1 is an end elevation of a container embodying my invention, a portion of the same being broken away;

Fig. 2 is a transverse sectional view of the container, parts being broken away;

Fig. 3 is a plan of the blank embodying the bottom, sides and the top flaps;

Fig. 4 is a plan of the blank embodying the end panels; and

Fig. 5 is a perspective view of a container embodying my invention.

In the construction of my container, I provide a blank scored on the lines 1, 2, 3 and 4 to form the bottom panel 5 two side panels 6—6 and the two top flaps 7—7. The two top flaps are also transversely scored at 8—8 to provide inturned lip members 9—9.

In addition to the above scoring, the panels 5 and 6—6 are scored along their edges on the lines 10—10 to provide end flaps on the bottom and two side panels and these end flap portions are notched as at 11—11 on each side.

The blank forming the end panels is scored along the lines 12—12 to provide a bottom member 5' coinciding, when this blank is assembled with the blank shown in Fig. 3 with the bottom panel 5 and two end panels 13—13 which, when upturned, provide the ends of the box. These end panels are likewise scored along the lines 14—14 to provide flaps adapted to be inturned.

In assembly, the initial blank is bent along the lines 2 and 3, thereby providing the bottom panel 5 and two side panels 6—6. The blank illustrated in Fig. 4 is then laid transversely of the bottom panel 5 with the panels 13—13 upturned, thereby forming the end panels. The end flaps 15—15 are then turned upwardly and stitched to the end panels 13—13 at the opposite ends of the box and likewise the flaps 16—16 at each end of the box are turned inwardly and stitched to the end panels, thereby forming a rigid unitary structure. A reenforcing bracing frame, substantially rectangular in shape and preferably being formed of wire as 18 is laid within the container along the top edge thereof and the two flaps 19 on the end panels 13 are turned downwardly over the ends of this wire frame, thereby maintaining the same in position. These end flaps 19 are slightly shorter in width to accommodate the sides of the metal frame, as shown in Fig. 5 and it will be noticed that the length of these end flaps 19 is such that their bottom edge 20, when they are turned downwardly and stitched to the panel, is in alignment with the top edge 21 of the hand openings 22 formed in the end panels, thereby greatly reenforcing that portion of the end panel immediately above the hand opening to prevent any danger of the panel being turned out at this portion. It will also be noted that the wire frame materially reenforces the upper edge of the end panels. This is particularly advantageous in containers adapted for beer bottles and the like, as it has been found that more frequently than not, in handling cases of bottled beer, the handler will carry the same by one end, thereby throwing immense strain on that end panel, particularly at the point immediately above the hand hole and up to the top edge.

For dividing the container into compartments, I provide longitudinally extending dividers 23 extending longitudinally of the box and preferably formed of press board, straw board, corrugated board or the like, although somewhat lighter than the material from which the container itself is constructed. These longitudinally extending dividers are rather low in height and are slotted outwardly about halfway to cooperate with and be received in slots 24 in the transversely extending dividers 25 which extend transversely of the box and are about the same height as the dividers 23. In addition to these transversely extending dividers I provide additional transverse dividers 25' which extend to the top of the container and are notched at their edges

as 26 to fit below, at this point, the longitudinally extending sides of the metal frame brace 18. The divider structure as a whole is thus prevented from being withdrawn in normal use of the container, although the divider frame work is such that it can be very readily shifted slightly to clear these notches of the frame. The transverse dividers 25 are also provided with top notches 27 which receive the end flaps 9 of the top members 7 when the top members are closed.

I claim as my invention:

1. A shipping container formed of fiber board having end panels provided with hand holes, a reenforcing rod conforming to the shape of the container extending around the top edge thereof on the side, and the end panels having a portion folded down from the top edge thereof over the end portions of said frame and to a point immediately above the top edge of a hand hole and stitched in its folded position to the end panel by a plurality of stitches above the top edge of the hand hole opening.

2. A shipping container formed of fiber board having side and end panels, a reenforcing rod extending on the inner upper edge of said sides and end panels and compartment dividers arranged within said container, at least some of said dividers having portions engaging beneath at least a portion of said rod to prevent vertical displacement of the dividers.

3. A shipping container formed of fiber board having side, bottom and end panels, the end panels being provided with hand holes, a reenforcing metal frame arranged within said container and having its sides and ends lying adjacent the top edge of the side and end panels of the container, the end panels of the container having flaps, downwardly turned over the ends of the frame and secured to the end panels, and dividers arranged within said container, at least a portion of said dividers having a portion of their upper edges engaging beneath the side members of said frame.

4. A shipping container formed of two blanks, the first blank providing bottom, two side panels and top wings, the side and bottom panels being provided with end flaps, a second blank comprising a bottom panel and two end panels, the end panels being provided with top flaps, the bottom panel of the second blank coinciding with the bottom panel of the first blank and the end flaps of the first blank being folded inwardly and being secured to the end panels of the second blank, a reenforcing frame arranged within the upper edge of said container and the top flaps of the end panels being folded down over the ends of said frame to maintain said frame in position and secured to the face of the end panels.

5. A shipping container formed of two fiber board blanks, one of said blanks comprising a bottom panel, two side panels and two top leaves, said side and bottom panels being provided with end flaps, the other blank comprising a bottom panel and two end panels, the end panels being provided with flaps, the bottom panel being adapted to coincide with the bottom panel of the first-mentioned blank and the end flaps on the first-mentioned blank being folded inwardly and secured to the end panel of the second-mentioned blank, the end flaps of the end panels being adapted to be folded inwardly and secured to the end panels and a substantially rectangular reenforcing metallic frame arranged at the top edge of said box and secured in position by said inturned end flaps.

ORVA O. NICKERSON.