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2,334,902

COLLAPSIBLE BOX OR CONTAINER

Filed Jan. 2, 1942

2 Sheets-Sheet 1

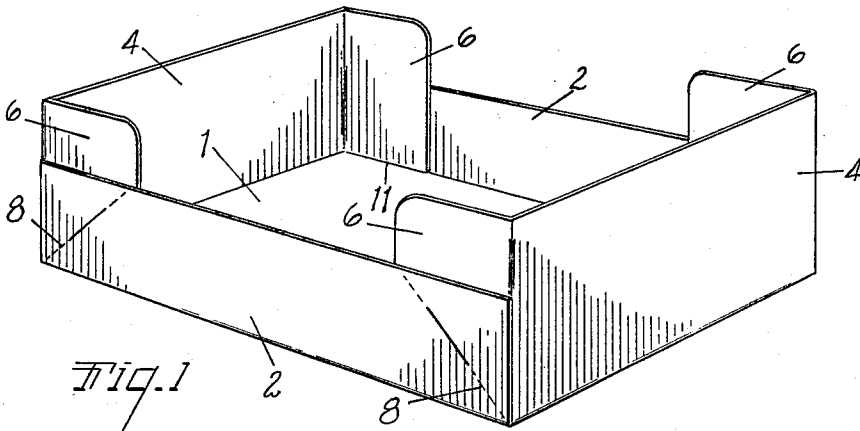


Fig. 1

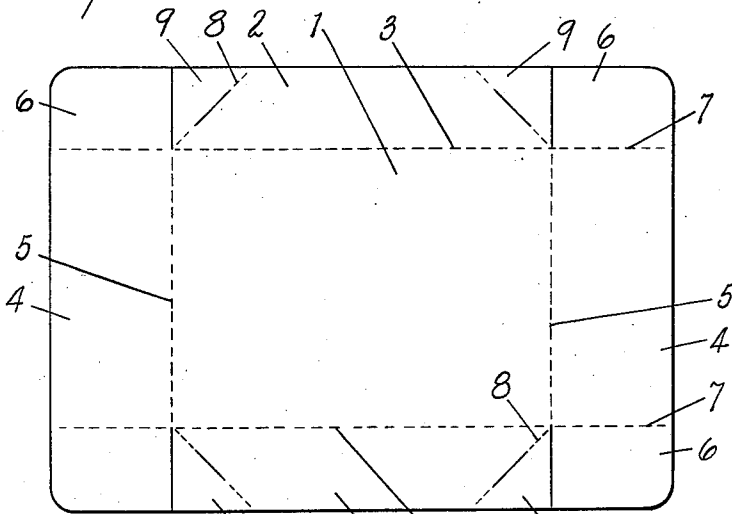
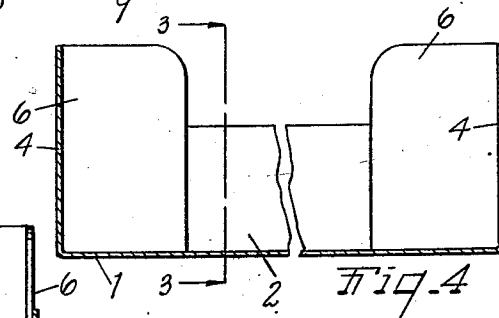
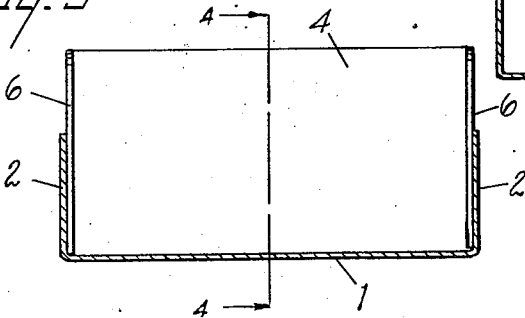


Fig. 2

Fig. 3



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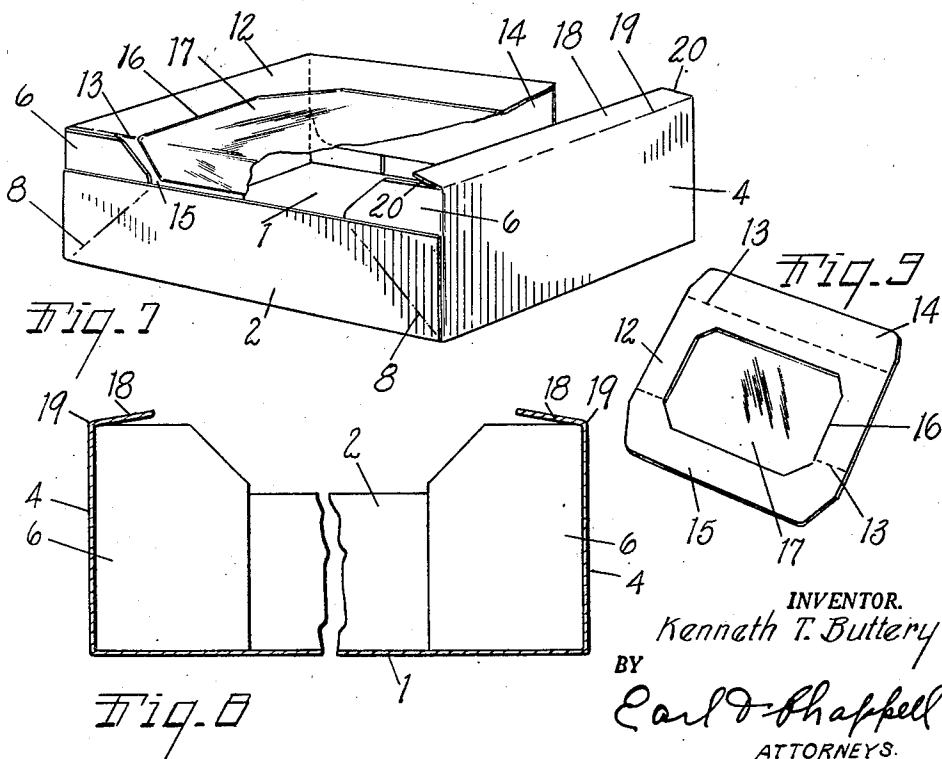
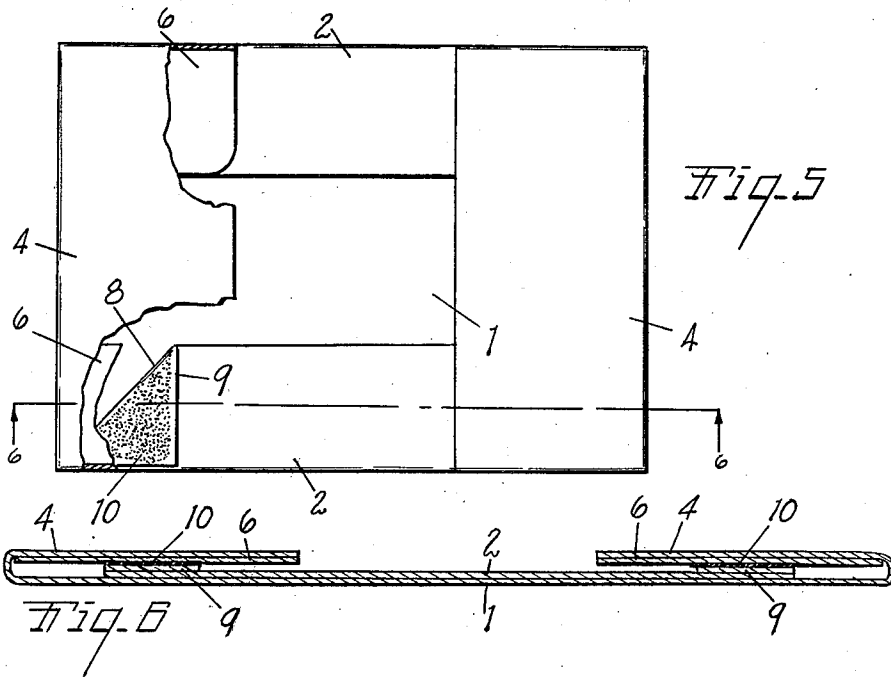
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COLLAPSIBLE BOX OR CONTAINER

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2 Sheets-Sheet 2



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2,334,902

COLLAPSIBLE BOX OR CONTAINER

Kenneth T. Buttery, Kalamazoo, Mich., assignor
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Mich.

Application January 2, 1942, Serial No. 425,390

5 Claims. (Cl. 229—32)

This invention relates to improvements in collapsible box or container.

The main objects of this invention are:

First, to provide a collapsible box or carton well adapted for the display of foods such as baked goods, which is rigid when erected and may be formed with a substantial saving of stock, capacity considered.

Second, to provide a collapsible box or container of this character which may be quickly erected, the walls of which are maintained in their upper or erected position, and which is attractive in appearance.

Objects pertaining to details and economies of the invention will definitely appear from the description to follow. The invention is pointed out in the claims.

A structure which embodies the features of this invention is clearly illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of the body of my improved box or container in erected position.

Fig. 2 is a plan view of the blank from which the box shown in Fig. 1 is formed.

Fig. 3 is a transverse section on line 3—3 of Fig. 4.

Fig. 4 is a longitudinal section on line 4—4 of Fig. 3.

Fig. 5 is a fragmentary plan view of the box collapsed.

Fig. 6 is an enlarged longitudinal section on line 6—6 of Fig. 5.

Fig. 7 is a perspective view of a box embodying my invention provided with a cover.

Fig. 8 is an enlarged fragmentary longitudinal section of the box shown in Fig. 7 with the cover removed.

Fig. 9 is a perspective view of the cover shown in Fig. 7 in its flat or extended position.

The embodiments of my invention illustrated are particularly designed for use in packaging baked goods for display and delivery, although it will be understood that the invention is capable of embodiment in and desirable for boxes or containers for various uses.

It has been quite general practice in containers designed for use as food packages to recess the side wall. This results in considerable waste and one of the result of this invention is to eliminate that waste.

The embodiment of the invention illustrated in Figs. 1-6 comprises a bottom 1 having main side wall members 2 hinged to the opposite edges thereof along the scoring lines indicated at 3. The end wall members 4 are hinged to the ends

of the bottom by scoring lines indicated at 5. The end wall members are of substantially greater height or vertical width than the side wall members.

The end wall members 4 have their extensions 6 hinged thereto along the scoring lines indicated at 7, these extensions 6 constituting auxiliary side wall members. The side wall members 2 have diagonally scored or weakened lines 8 at each end thereof providing triangular joint flaps 9 which are collapsed on the outer sides of the main wall members. The main side wall members 2 are collapsed inwardly upon the bottom with their auxiliary flaps 9 turned or folded outwardly thereon, and the auxiliary side wall members 6 are secured, preferably adhesively as indicated at 10, to the inner sides of these joint flaps, the outer sides of the auxiliary side wall member 6 being positioned against the inner sides of these joint flaps 9 and secured thereto. This may be conveniently accomplished by folding the main side wall members inwardly upon the bottom with the joint flaps turned outwardly and folded thereon and provided with adhesive, then folding the auxiliary side wall members 6 inwardly upon the end wall members 4, and then folding these parts inwardly upon the bottom and adhering the auxiliary side wall members 6 to the joint flaps.

With the parts thus secured the box is erected by swinging the end walls outwardly to erected position. The auxiliary side wall members are swung into erected position with their lower edges 11 resting upon the bottom so that they constitute means for keeping the parts in erected position and providing quite a rigid structure. As the auxiliary side wall members 6 are of substantially greater height or vertical width than the members 2 this results in recessed side walls and a box of desired capacity is produced from a rectangular blank. The upper edges of the end wall members may be notched as desired for the sake of uniformity in appearance.

In the embodiment shown in Figs. 7, 8 and 9 the box is provided with a cover 12. This cover is formed from a sheet of suitable stock scored as indicated at 13 to provide side tucking flaps 14 and 15. The cover is provided with a window 16 closed by a sheet of suitable flexible transparent material 17. Where a cover is to be used I preferably provide the end walls with cover flaps 18, these being extensions on the upper edges of the end wall members connected thereto through the hinge connection 19. The cover is applied by turning the cover flaps 18 inwardly

and tucking the tucking flaps 14 and 15 between the end edges 20 of these cover flaps and the auxiliary side wall members 6 as clearly shown in Fig. 7. The window is preferably arranged to extend into the tucking flap 15 of the cover to better display the contents of the container. Of course, it may be extended into both tucking flaps which constitute side members for the cover closing the recessed sides of the container.

By thus forming and arranging the parts I produce boxes or containers from a minimum of stock, capacity considered, and without waste of stock. Further, the structure when erected is rigid and when the cover is used the container is effectively sealed or closed, and is well supported.

I have illustrated and described practical embodiments of my invention. I have not attempted to illustrate or describe other adaptations or embodiments as it is believed this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired.

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

1. In a collapsible box or container, the combination of bottom, main side wall members and end wall members, said main side wall members and end wall members having hinged connection to the respective edges of the bottom, the end wall members being of a substantially greater height than the side wall members and having flap-like extensions at the ends thereof constituting auxiliary side wall members, the width of said auxiliary side wall members being substantially greater than the width of said main side wall members, said main side wall members being diagonally scored to provide triangular joint flaps at the ends thereof collapsible upon the outer sides of the main side wall members, said auxiliary side wall members being secured to the inner sides of the adjacent side wall joint flaps to permit inward collapsing of said main side wall members with the said auxiliary side wall members secured thereto upon the bottom and the collapse of said end wall members and of said auxiliary side wall members thereon, said auxiliary side wall members projecting substantially above the upper edges of the main side wall members when the container is in erected position, to thereby define a container having a solid end wall structure and a side wall structure which is substantially recessed between the end wall members of said end wall structure, cover flaps on the upper edges of said end walls, and a cover adapted to be positioned over said cover flaps and having side tucking flaps disposed between the ends of said cover flaps and said auxiliary side wall members, said cover being provided with a window extending into at least one of said tucking flaps and between the said auxiliary side wall members at that side of the container for viewing the contents of the box in the recessed area of said side wall structure.

2. In a collapsible box or container, the combination of bottom, main side wall members and end wall members, said main side wall members and end wall members having hinged connection to the respective edges of the bottom, the end wall members being of a substantially greater height than the side wall members and having flap-like extensions at the ends thereof constituting auxiliary side wall members, the width of said auxiliary side wall members being substantially greater than the width of said main side

5 wall members, said main side wall members being diagonally scored to provide triangular joint flaps at the ends thereof collapsible upon the outer sides of the main side wall members, said auxiliary side wall members being secured to the inner sides of the adjacent side wall joint flaps to permit inward collapsing of said main side wall members secured thereto upon the bottom and the collapse of said end wall members and of said auxiliary side wall members thereon, said auxiliary side wall members projecting substantially above the upper edges of the main side wall members when the container is in erected position to thereby define a container having a solid end wall structure and a side wall structure which is substantially recessed between the end wall members of said end wall structure, a cover for said carton provided with side portions extending over the recesses of the side wall structure, said cover having a window extending into at least one of said side portions.

3. In a collapsible box or container, the combination of bottom, main side wall members and end wall members, said main side wall members and end wall members having hinged connection to the respective edges of the bottom, the end wall members having flap-like extensions at the ends thereof of a width substantially greater than the width of said main side wall members constituting auxiliary side wall members, said main side wall members having joint flaps at the ends thereof collapsible upon the outer sides of the main side wall members, said auxiliary side wall members being secured to the adjacent side wall joint flaps to permit inward collapsing of said main side wall members with the said auxiliary side wall members secured thereto and the collapse of said end wall members and of said auxiliary side wall members thereon, said auxiliary side wall members projecting substantially above the upper edges of said main side wall members when the container is in erected position, to thereby define a container having a solid end wall structure and a side wall structure which is substantially recessed between the end wall members of said end wall structure, cover flaps on the upper edges of said end walls, and a cover adapted to be positioned over said cover flaps and having side tucking flaps disposed between the ends of said cover flaps and said auxiliary side wall members, said cover being provided with a window extending into at least one of said tucking flaps and between the said auxiliary side wall members at that side of the container for viewing the contents of the box in the recessed area of said side wall structure.

4. In a collapsible box or container, the combination of bottom, main side wall members and end wall members, said main side wall members and end wall members having hinged connection to the respective edges of the bottom, the end wall members having flap-like extensions at the ends thereof of a width substantially greater than the width of said main side wall members constituting auxiliary side wall members, said main side wall members having joint flaps at the ends thereof collapsible upon the outer sides of the main side wall members, said auxiliary side wall members being secured to the adjacent side wall joint flaps to permit inward collapsing of said main side wall members with the said auxiliary side wall members secured thereto and the collapse of said end wall members and of said auxiliary side wall members thereon, said side wall members projecting substantially above

the upper edges of said main side wall members when the container is in erected position, cover flaps on the upper edges of said end walls, to thereby define a container having a solid end wall structure and a side wall structure which is substantially recessed between the end wall members of said end wall structure, and a cover adapted to be positioned over said cover flaps and having side tucking flaps disposed between the ends of said cover flaps and said auxiliary side wall members.

5. In a collapsible box or container, the combination of bottom, main side wall members and end wall members, said main side wall members and end wall members having hinged connection to the respective edges of the bottom, the end wall members having flap-like extensions at the ends thereof of a width substantially greater than the width of said main side wall members constituting auxiliary side wall members, said

main side wall members having joint flaps at the ends thereof collapsible upon the outer sides of the main side wall members, said auxiliary side wall members being secured to the adjacent side wall joint flaps to permit inward collapsing of said main side wall members with the said auxiliary side wall members secured thereto and the collapse of said end wall members and of said auxiliary side wall members thereon, said auxiliary side wall members projecting substantially above the upper edges of said main side wall members when the container is in erected position for viewing the contents of the box in the recessed area of said side wall structure, a cover for said carton, provided with side portions extending over the recesses of the side wall structure, said cover having a window extending into at least one of said side portions.

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