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3,079,058

FROZEN POULTRY CONTAINERS

Filed Aug. 26, 1960

2 Sheets-Sheet 1

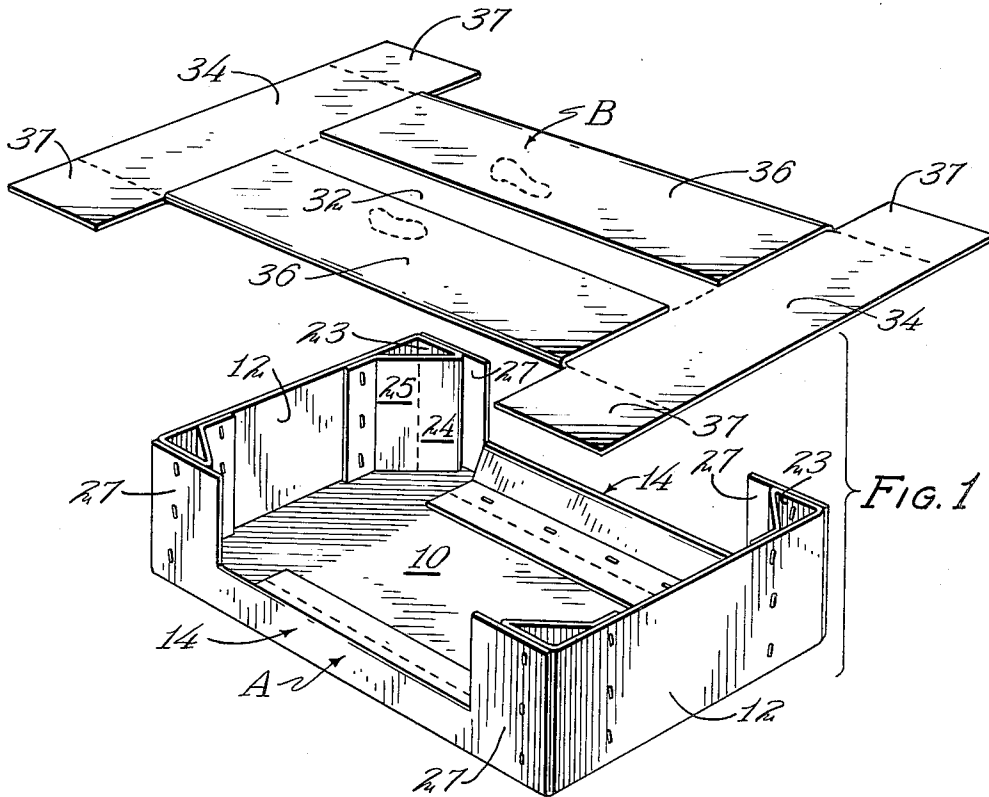


FIG. 1

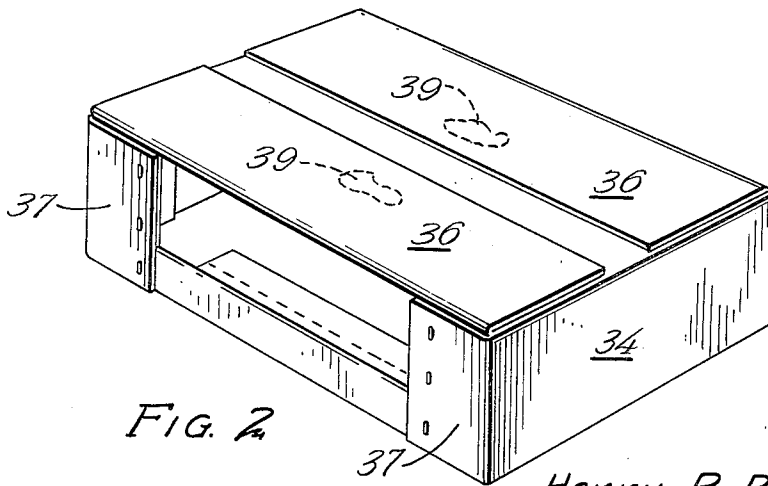


FIG. 2

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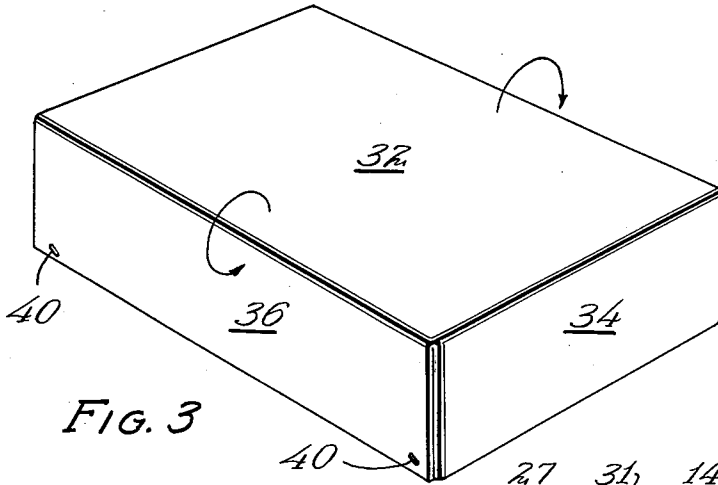


FIG. 3

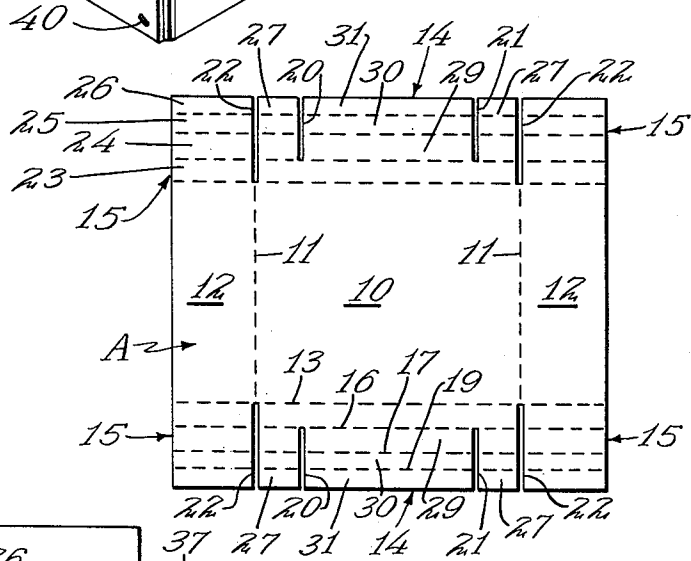


FIG. 4

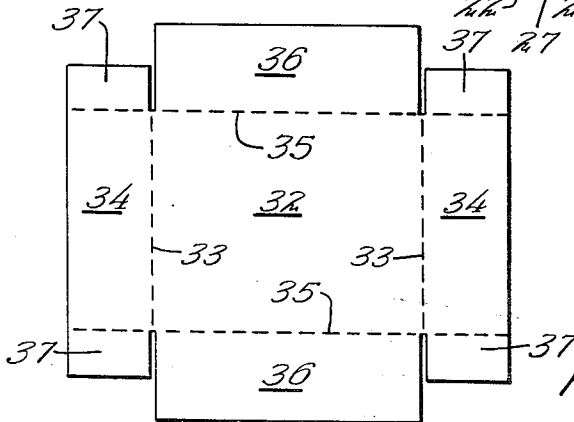


FIG. 5

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FROZEN POULTRY CONTAINERS

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This invention relates to an improvement in containers designed for use for containing frozen poultry such as turkeys and the like and comprises a container designed to receive poultry before it is frozen, which includes open sides to permit circulation of cold air during the freezing process, and which may be later closed and sealed.

For some years containers have been made with portions of the side walls cut down or reduced in height so that air may be circulated through the containers after they have been closed. In some instances, containers of this type have been provided with telescoped covers which may be used to cover the containers after the poultry has been frozen and which in some instances are provided with side walls of reduced height which may be registered with the similar walls of the bottom part of the container during the freezing process and which may be removed and turned over for reinsertion in closing the containers. Also, such containers have in some cases been provided with triangular corner posts to increase the stacking strength of the containers.

While containers of this type have been produced which are strong enough to permit a number of containers to be placed one above the other during the freezing process, the reduced height of container side walls weakens the containers very materially if the containers are not carefully stacked. In other words, if each container is not directly above the other, the end wall of the lower container will bow outwardly allowing the entire stack of containers to tip over. While the containers have plenty of stacking strength if properly stacked, they are quite weak when not properly stacked resulting in considerable difficulty.

It is an object of the present invention to provide a container of a type similar to that which has been previously used including a bottom portion, the end walls of which are folded to provide triangular corner posts at the corners of the container and the side walls of which are folded down to provide side wall portions of reduced height. The top of the container includes a top panel and side and end wall flaps which are designed to extend down over the sides and ends of the container bottom to close the container. After the bottom portion of the container has been packed, the top of the container is applied and the end wall flaps are folded down over the ends of the container bottom. However, during this operation the side wall flaps of the cover are folded in a reverse direction to overlie the top panels of the cover and are preferably temporarily anchored to the top panel in some manner. As a result, a double thickness cover is provided which overlies the corner post and end walls of the lower section of the container and which therefore greatly strengthens the top and prevents the end walls of the container from bowing outwardly when the containers are stacked one upon the other. After the freezing operation, the flaps are merely folded down over the side walls and stitched or otherwise secured in place to close the container.

A feature of the present invention resides in the provision of a container of the type described which, in preferred form, includes side wall flaps on the ends of the end wall flaps of the cover section which may be folded to overlie the full depth end portions of the side walls,

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thereby providing an effective reinforcement for the container during the freezing operation.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification:

FIGURE 1 is a diagrammatic perspective view showing the lower section of the container and showing the top section elevated above the bottom section.

FIGURE 2 is a perspective view of the container in the position it will appear for the freezing operation.

FIGURE 3 is a perspective view of the closed container.

FIGURE 4 is a diagrammatic view of the blank from which the lower section of the container is formed.

FIGURE 5 is a diagrammatic view of the blank from which the top section of the container is formed.

The bottom section of the container is indicated in general by the letter A. This bottom section A is rectangular in form and includes a bottom panel 10 which is foldably connected along parallel fold lines 11 to end walls 12. The bottom panel 10 is also connected along fold lines 13 which are at right angles to the fold lines 11 to side walls which are indicated in general by the numeral 14. The end walls 12 are similarly connected along extensions of the fold line 13 to corner flap structures which are indicated in general by the numeral 15.

Three parallel fold lines 16, 17 and 19 divide the area between the fold lines 13 and the adjacent side edges of the blank into four panel sections. Slots 20 and 21 extend from the side edges of the blank to the fold lines 16. The blank is also slotted at 22, the slots 22 being aligned with the fold lines 11, the slots 22 separating the flap structures 15 from the side walls 14. The fold lines 17 and 19 need not continue across the area of the side walls between the slots 20 and 21 and the adjacent slots 22, but the fold lines are usually continuous across the blank in order that the blanks may be formed on a conventional printer-slotter.

The fold lines 13, 16, 17 and 19 divide the flap structures 15 into four panels 23, 24, 25 and 26. As indicated in FIGURE 1 of the drawings, in setting up the bottom section 3, the side walls 14 are folded up into right angular relation to the bottom panel 10, and the panels 23 are stitched in face contact to the inner surface of the portions of the side walls 14 which are indicated at 27 and which are located between the slots 20 and 22 and the slots 21 and 22. The panels 24 and 25 remain in a common plane and are folded to extend diagonally of the corners of the container section. The panel 26 is then stitched or otherwise secured to the inner surface of the adjoining end wall 12. Thus a rectangular tray section is provided having diagonally extending corner posts and greatly increase the stacking strength of the container section.

The fold lines 16, 17 and 19 divide the section of the side walls 14 between the slots 20 and 21 into three elongated panels 29, 30 and 31. In completing the container, the panel 29 is folded down along the fold line 16 so that the panel 29 lies inwardly of the portion of the side wall between the fold lines 13 and 16. The panels 30 and 31 are folded flat into face contact with the bottom panel 10 and are secured in place by stitching or other suitable means.

In the event the container section is made by die cutting process, certain portions of the fold lines described may be omitted. The portion of the fold line 17 extending through the side wall sections 27 and separating the panels 24 and 25 of the end flap structures may be omitted. Similarly, the portions of the fold lines 19 between the slots 22 on each side wall may be omitted. The top sec-

tion of the container is indicated by the letter B and includes a top panel 32 which is foldably connected along parallel fold lines 33 to end flaps 34. The top panel 32 is also connected along parallel fold lines 35 to side wall panels 36. Corner flaps 37 are hingedly connected to the ends of the end wall panels 34 along continuations of the fold lines 35.

In the preferred form of the structure, the side wall panels 36 are folded to overlie the top panel 32 and are secured thereto by any suitable means such as spots of adhesive indicated in FIGURE 2 at 39. In use, the bottom sections A of the container are filled with turkeys or other product to be frozen. After these bottom sections have been packed, the top sections B are lowered into place upon the bottom sections, the top panel 32 coinciding with the top of the lower section. The end flaps 34 are then folded down to lie outwardly of the end walls 12 of the lower section, and the corner flaps 37 are folded to overlie the section 27 of the side walls 14 of the lower section. The flaps 37 are stapled or otherwise secured in place and the packed container then appears as indicated in FIGURE 2 of the drawings, the sections of the side walls between the portions 27 being opened so that cold air may be circulated through the containers into intimate contact with the product.

After the product has been frozen, the side wall flaps 36 are pulled upwardly and folded down over the side walls of the bottom portion of the container and stitched in place by suitable means such as the staples 40.

Due to the fact that the covers are of double thickness when stacked for freezing, and due to the further fact that the end wall flaps 34 and flaps 37 lie outwardly of the bottom section of the container during this operation, the containers may be readily stacked one upon the other, even though they are not perfectly aligned as was previously always necessary. Furthermore, the double thickness top panels assist in holding the bottoms of the containers from sagging until the product is frozen.

In accordance with the patent statutes, I have described the principles of construction and operation of my improvement in containers designed for use for containing frozen poultry, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that changes may be made within the scope of the

following claims without departing from the spirit of my invention.

I claim:

1. A container for use with frozen poultry and the like comprising a bottom section including a bottom panel, side and end walls extending upwardly therefrom, said side walls including intermediate portions of substantially less height than the ends of the side walls and the height of the end walls, a cover including a top panel, end wall flaps lying outwardly of said end walls and in face contact therewith, corner flaps on the sides of said wall flaps secured in face contact with the ends of said side walls, and side wall flaps each comprising a single rectangular panel of the approximate size of the bottom section side wall, hingedly secured to the side edges of, and folded to overlie said top panel.

2. The structure of claim 1 and including means detachably securing said side wall flaps to said top panel.

3. A container for use with frozen poultry and the like comprising a bottom section including a bottom panel, side and end walls extending upwardly therefrom, said side walls including intermediate portions of substantially less height than the ends of the side walls and the height of the end walls, triangular corner posts integral with the side edges of said end walls, a cover including a top panel, end wall flaps lying outwardly of said end walls and secured in face contact therewith, corner flaps hinged to the ends of said end wall flaps and secured in face contact with the end portions of said side walls, and side wall flaps, each comprising a single rectangular panel of the approximate size of the bottom section side wall, hingedly secured to the side edges of said top panel and folded to overlie said top panel.

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