

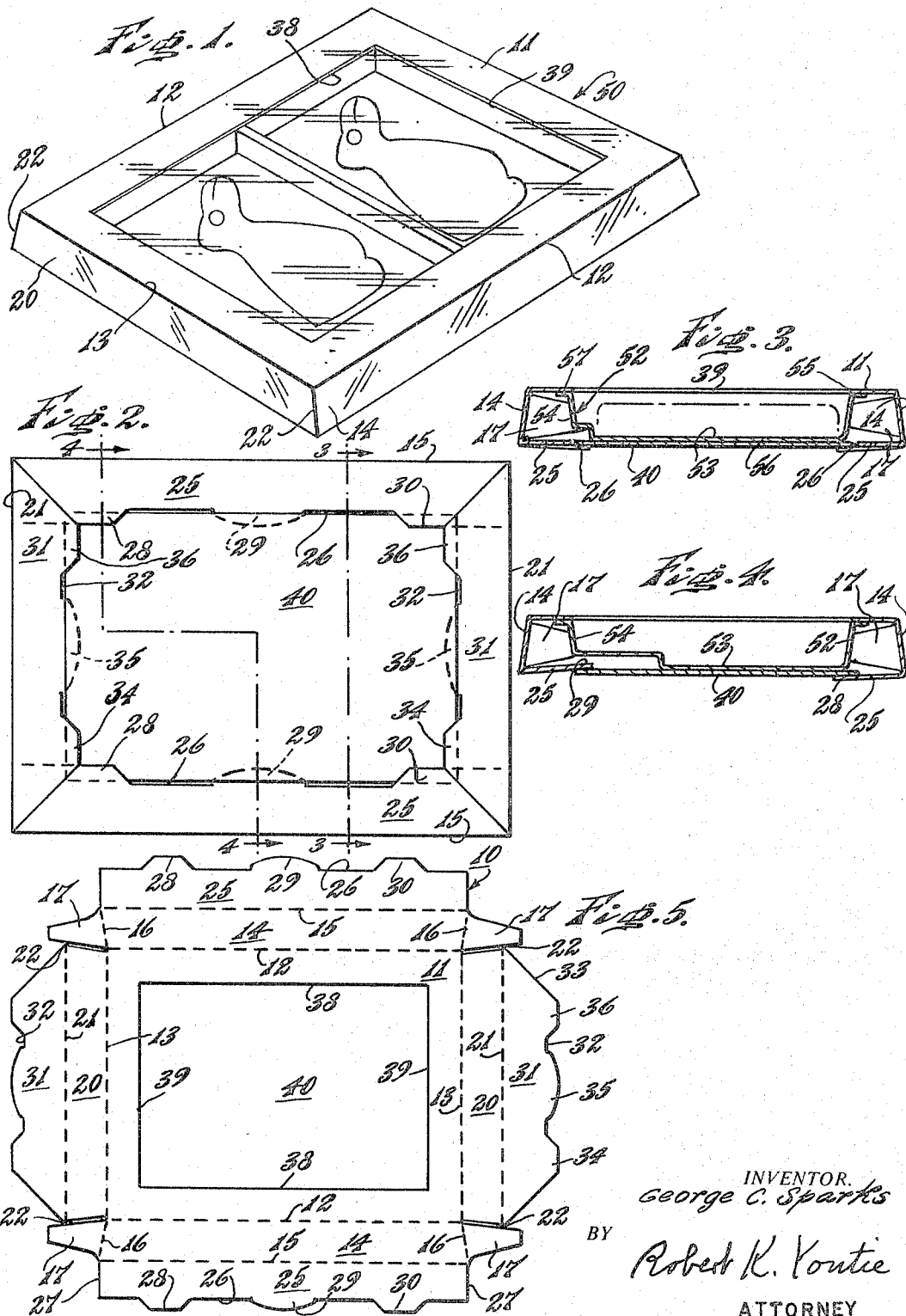
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DISPLAY PACKAGE

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DISPLAY PACKAGE

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1 Claim. (Cl. 206—45.31)

This invention relates generally to packaging, and embraces a unique package construction and method of manufacture.

It is an important object of the present invention to provide a display-type package construction which is extremely economical to manufacture, employing a minimum of material, and which is neat and highly attractive in appearance.

It is a further object of the present invention to provide a package construction and method of manufacture wherein relatively thin, lightweight packaging materials may be employed for effecting substantial reduction in cost, while producing a staunch and durable package adapted to effectively protect the contents thereof.

It is a more particular object of the present invention to provide a display-type package construction, wherein the contents are adapted to be exposed to view through a wall opening of the package, and wherein the material removed from the wall opening is utilized to effect substantial savings in cost of materials.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claim.

In the drawings:

FIGURE 1 is a top perspective view showing a package constructed in accordance with the teachings of the present invention and overwrapped with transparent sheet material;

FIGURE 2 is a bottom plan view of the package construction of FIGURE 1, with the overwrap removed;

FIGURE 3 is a sectional view taken generally along either of the lines 3—3 of FIGURE 2;

FIGURE 4 is a partial sectional view taken generally along either of the lines 4—4 of FIGURE 2; and

FIGURE 5 is a plan view showing a blank adapted to be employed in the instant package construction.

Referring now more particularly to the drawings, and specifically to FIGURE 5 thereof, a blank of the present invention is there generally designated 10, and may be formed of a single sheet of stiff, bendable material, such as paperboard, or the like. The blank 10 may include a main, centrally located panel 11, which may be of generally rectangular-outline configuration, being bounded by a pair of parallel spaced longitudinal fold lines 12, and parallel spaced transverse fold lines 13 extending between respective ends of the longitudinal fold lines. Extending outward from respective fold lines 12 are a pair of side panels 14, which may each be of generally trapezoidal configuration. Thus, each side panel 14 may be bounded within its adjacent fold line 12 and a parallel fold line 15 of slightly greater extent than the fold line 12. Extending between adjacent ends of the fold lines 12 and 15 of each side panel 14 are end folds or creases 16, each extending obliquely outward from the juncture of intersecting fold lines 12 and 13. A pair of securement tabs 17 may extend from respective folds 16 of each side panel 14.

Extending from each fold or crease 13 is a generally trapezoidal end panel 20 bounded within its adjacent fold 13, a parallel fold 21, and a pair of edges 22 each

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extending between adjacent ends of folds 13 and 21, obliquely outward from a juncture of intersecting folds 12 and 13.

A pair of generally rectangular side flaps 25 extend from respective folds 15, being coextensive therewith. The flaps 25 are each bounded within the adjacent fold 15, a longitudinal edge 26 parallel to the adjacent fold 15, and end edges 27 extending between adjacent ends of fold 15 and edge 26. Projecting from edge 26, at spaced locations therealong, are tabs 28, 29 and 30. The outer tabs 28 and 30 may be generally trapezoidal in configuration, and the medial tab 29 may be of arcuate or half-moon outline configuration.

A pair of flaps 31 extend outward from respective folds 21, each being of generally trapezoidal configuration and tapering in the direction away from adjacent fold 21 to an edge 32 parallel to fold 21. End edges 33 extend between adjacent ends of each fold 21 and edge 32, being convergent toward the latter edge; and, the edge 32 may be provided therealong with spaced tabs 34, 35 and 36. The outer tabs 34 and 36 may be of generally trapezoidal configuration and the medial tab 35 may be of arcuate or half-moon configuration.

The main panel 11 is formed centrally thereof with a generally rectangular line of severance including a pair of parallel spaced cuts 38 extending along respective folds 12, and a pair of parallel spaced cuts 39 extending along respective folds 13 between the adjacent ends of cuts 38. The cuts 38 and 39 thus define therewithin a generally rectangular panel 40 centrally of the panel 11 and removable therefrom, for a purpose appearing presently.

In FIGURES 1-4 is shown a package, generally designated 50, constructed from the blank 10 of FIGURE 5. With the central panel 40 removed from the blank 10, the side panels 14 and 20 are folded downward along their respective folds 12 and 13, and secured in their downwardly folded relation by gluing of the flaps 17 to the panels 20. Thus, the main panel 11 defines a top wall, and the panels 14 and 20 define side walls depending from the top wall. The top wall 11 is provided with a central opening bounded within the cut edges 38 and 39 upon removal of the panel 40.

The flaps 25 and 31 are folded inward from the lower edges 15 and 21 of depending side walls 14 and 20 to spacedly underlie the top wall 11. Inwardly extending, opposite flaps 25 terminate short of each other, as do inwardly extending opposite flaps 31, so as to define therebetween a bottom opening bounded essentially by the flap edges 26 and 32. The opening bounded by the edges 26 and 32 is substantially congruent to the panel 40 removed from front wall 11. Hence, the panel 40 is engageable in the opening between the bottom flaps 25 and 31, and the tabs 28, 29, 30, 34, 35 and 36 may be alternately engaged on opposite sides of the panel 40 to retain the latter in position.

A formed tray or receptacle 52 is seated in upwardly facing relation on the bottom panel 40, and may include a bottom wall 53, a side wall 54 upstanding peripherally about the bottom wall, and an outstanding upper edge flange 55 extending about the upper edge of the side wall. In practice, the receptacle or tray 52 may be formed of relatively thin sheet plastic, as by thermoforming techniques, and specifically configured to conformably receive the intended articles of contents. For increased rigidity of the entire assembly, and in order to enable the tray to be fabricated of relatively thin, lightweight sheet material, it is advantageous that the tray be secured to both the panel 40 and top wall 11. This may advantageously be accomplished by simultaneously heat sealing the bottom wall 53 of tray 52 to the bottom panel 40, as at 56, and heat sealing the tray flange 55 to the underside of top wall 11, as at 57.

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It is, of course, appreciated that the steps in the instant method of manufacture may be varied in their sequence, as desired. For example, it may be found advantageous to adhesively secure the tray 52 to both the panel 40 and top wall 11 prior to folding of the side walls and flaps 14, 20, 25 and 31. In addition, other variations may appear obvious to those skilled in the art.

From the foregoing, it will now be appreciated that the present invention provides a display container and method of manufacturing the same which effect substantial economies in materials, effecting utilization of the removed panel 40 in the container bottom, and wherein effective reinforcement of the container construction is achieved by fastening of the tray 52 to both the bottom panel 40 and top wall 11 to permit utilizing relatively lightweight material without sacrificing strength and protection.

While the package construction of the instant invention has been illustrated as of overall rectangular configuration, it is appreciated that the instant package construction may be of square or other desired polygonal configuration, without departing from the concepts disclosed herein. Further, the sectional views of FIGURES 3 and 4 taken transversely through the rectangular container construction may be substantially identical to longitudinal sectional views.

Although the present invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be made within the spirit of the invention and scope of the appended claim.

What is claimed is:

A package construction comprising a generally polygonal top wall, said top wall being provided with a generally central thru opening, a plurality of depending side walls depending from the edges of said top wall about the

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periphery thereof, adhesive securing means securing said side walls together in their depending relation, bottom flaps extending inwardly from the lower edges of said side walls and terminating in bounding relation with a bottom opening substantially congruent to said top wall opening, a bottom panel removed from said top wall opening substantially congruent thereto and in closing relation with said bottom opening, interengaging means on said flaps and bottom panel retaining the latter in said closing relation, and an upwardly facing receptacle of heat-sealable material on said bottom panel beneath said top opening said receptacle including a generally polygonal bottom wall heat-sealed to said bottom panel, a plurality of upstanding side walls upstanding from the edges of said bottom wall adjacent to and spaced inward from said depending sidewalls, and upper flanges on the upper edges of said upstanding side walls heat-sealed to said top wall, whereby said package construction provides a staunch unitary structure with said receptacle and its contents cushioned by the outward spacing of said depending side walls.

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