

Oct. 24, 1967

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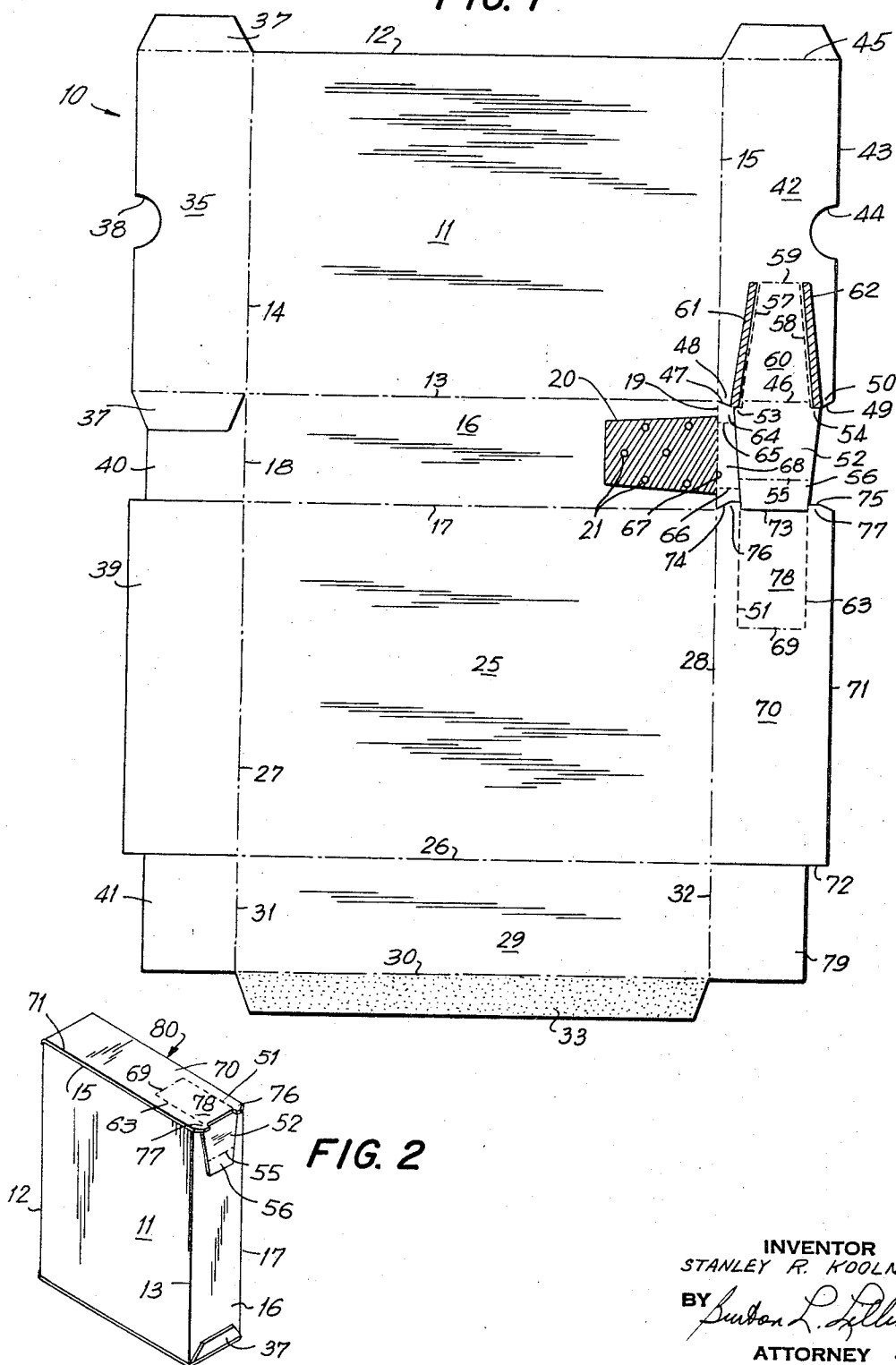
3,348,754

RECLOSABLE DISPENSING CONTAINER WITH SNAP LOCK

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2 Sheets-Sheet 1

FIG. 1



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FIG. 3

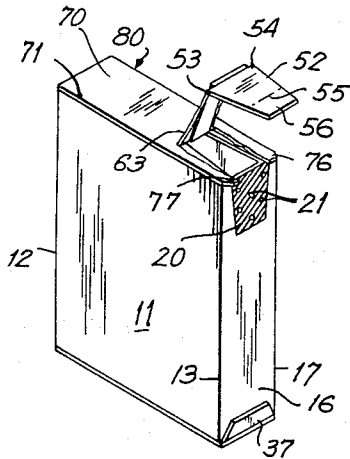


FIG. 4

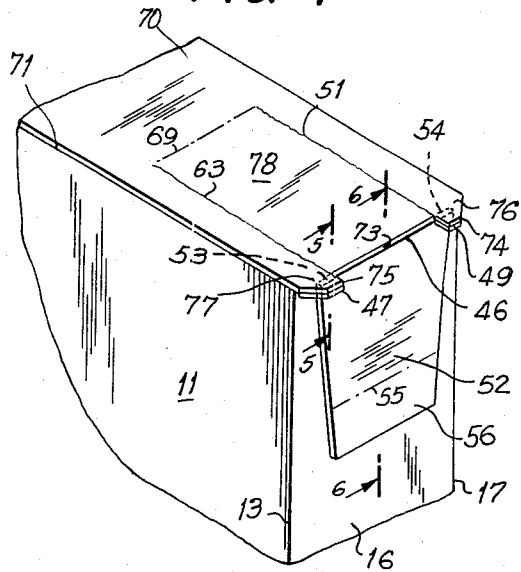


FIG. 5

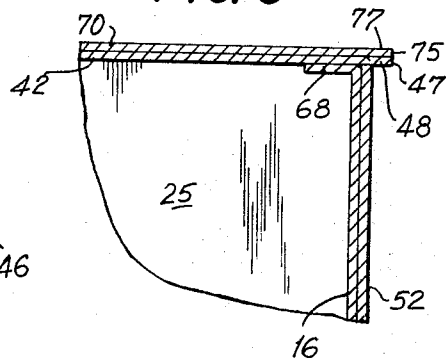
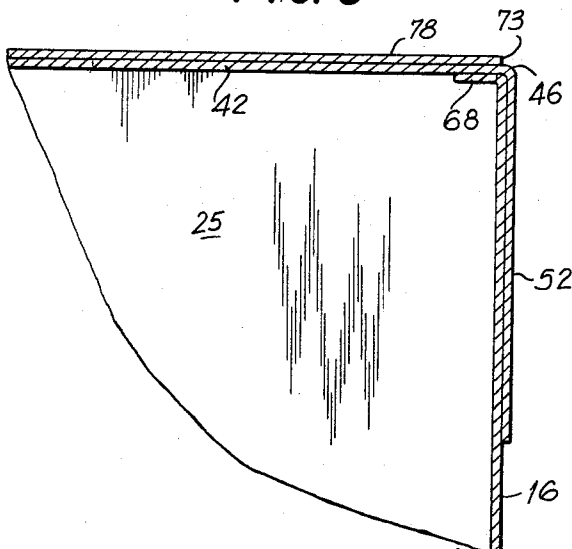


FIG. 6



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RECLOSABLE DISPENSING CONTAINER WITH SNAP LOCK

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ABSTRACT OF THE DISCLOSURE

This invention relates essentially to a reclosable container including a top wall comprising an inner and outer panel adhesively secured at select locations, a pair of spaced retainers projecting from said top wall and a tab extending from said top wall, whereby the container may be reclosed after initial opening by the positioning of the said tab between said pair of spaced retainers.

This invention relates generally to containers, and is especially concerned with containers of the reclosable dispensing type.

It is an important object of the present invention to provide a container construction having a reclosable dispensing structure which is easily opened from the initially sealed condition, and also equally easily closed to provide an effective resealing of the container.

It is another object of the present invention to provide a reclosable container wherein an openable closure, after initial opening thereof, may be positively retained in its reclosed condition to prevent inadvertent opening thereof.

It is still another object of the present invention to provide a reclosable container having the advantageous characteristics mentioned in the preceding paragraph, which is capable of inexpensive mass production while affording durable and reliable protection for the packaged contents, and which may be set up and filled by use of conventional packaging machinery.

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 claims.

In the drawings:

FIGURE 1 is a plan view showing a blank adapted to be formed into a reclosable container in accordance with the teachings of the present invention;

FIGURE 2 is a perspective view showing a reclosable container of the present invention as formed from the blank of FIGURE 1, and in its sealed condition;

FIGURE 3 is a perspective view similar to FIGURE 2, but showing the container in its open condition for dispensing;

FIGURE 4 is an enlarged fragmentary perspective view showing the dispensing structure of the container of FIGURES 2 and 3 in a reclosed condition;

FIGURE 5 is a partial sectional view taken generally along the line 5—5 of FIGURE 4; and

FIGURE 6 is a partial sectional view taken generally along the line 6—6 of FIGURE 4.

Referring now more particularly to the drawings, and specifically to FIGURE 1 thereof, the blank is there generally designated 10, and may be integrally fabricated of a single sheet of stiff bendable material, cut and scored to provide the blank. In particular, the blank 10 may include a first, relatively large main panel 11 of generally

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rectangular configuration, being bounded between a side edge 12, side fold 13 parallel to and spaced from said side edge, and a pair of lower and upper end folds 14 and 15 extending in parallelism with each other between opposite ends of the side edge 12 and fold 13. A first auxiliary panel 16 of generally rectangular configuration is hingedly connected to the panel 11 by the side fold 13, being longitudinally coextensive therewith, and is bounded between the fold 13, a side fold 17 parallel to the fold 13, and a pair of lower and upper end folds 18 and 19 extending in parallelism with each other between opposite ends of the folds 13 and 17. In addition, the panel 16 may be provided, at a location contiguous to the end fold 19 and extending longitudinally inward therefrom, with an area 20 of nonadhesive securement, such as provided by a coating of varnish, or the like. The nonadhesive coating 20 may be provided at spaced locations thereabout with a plurality of uncoated spots 21 for detachable adhesive securement thereto, as will appear more fully hereinafter.

Extending from the fold 17 of panel 16 is a second main panel 25, of generally rectangular configuration substantially congruent to that of panel 11 and longitudinally coextensive therewith. The panel 25 is bounded within the fold 17, a fold 26 parallel to the fold 17, and a pair of lower and upper end folds 27 and 28 extending in parallelism with each other, generally normal to and between opposite ends of the side folds 17 and 26. An additional generally rectangular auxiliary panel 29 extends from the fold 26 of panel 25, being longitudinally coextensive therewith, and is bounded within the fold 26, a fold 30 parallel to the fold 26, and a pair of lower and upper end folds 31 and 32 in parallelism with each other and respectively extending between opposite ends of the side folds 26 and 30. A glue flap 33 may extend from the panel 29, being connected thereto by the fold 30, and being substantially longitudinally coextensive therewith.

Extending from the lower end of panel 11, being connected thereto by the fold 14 and longitudinally coextensive therewith, is a generally rectangular panel 35 having ears 37 extending from opposite ends. The panel 35 may be formed with a cutout 38, as required by certain packaging machinery.

Similarly, the panel 25 is provided at its lower end with a generally rectangular panel 39 hingedly connected by fold 27 to the panel 25 and coextensive with the said connecting fold 27. A flap 40 may extend from the lower end fold 18 of auxiliary panel 16, and a flap 41 may extend from the lower end fold 31 of panel 29.

Extending from the upper end fold 15 of panel 11, and generally coextensive with the fold 15, is a panel 42 of generally rectangular configuration similar to that of panel 35. The panel 42 is bounded on its outer side by an edge 43 extending generally parallel to and spaced from the fold 15, which may have a cutout 44, as required by certain packaging machinery. At one end of panel 42, a fold 45 may extend normal to and between the fold 15 and edge 43, in substantial alignment with the edge 12. At the other end of the panel 42 there is provided a fold 46 generally parallel to the fold 45 and in substantial alignment with the fold 13. However, the fold 46 terminates at its opposite ends adjacent to and spaced from fold 15 and edge 43. Extending from the inner end of fold 46 adjacent to fold 15 is a generally convex edge or cut 47 extending to the juncture of folds 15, 13 and 19, and defining therewithin a projection 48 on the panel 42.

Similarly, from the other, outer end of fold 46, there extends a cut or edge 49 of generally convex configuration terminating at the edge 43 in substantial alignment with the fold 13 to define a projection 50 on the panel 42. The projections 48 and 50 are thus spaced laterally

from each other, projecting beyond the end fold 46 of the panel 42.

Extending outward from the fold 46, and connected to the panel 42 by the latter fold, is a tab 52, which is of a generally trapezoidal configuration, tapering outwardly away from the fold 46. More specifically, the tab 52 is configured to extend partially along and in conforming relation with each edge 47 and 49, so as to define a pair of outwardly extending side portions or wings 53 and 54, whence the tab 52 tapers outwardly away from the fold 46. If desired, an additional fold 55 may extend transversely across the tab 52 to provide a finger-pull tab end portion 56.

The panel 42 is further formed with a pair of weakened portions or severance lines 57 and 58 extending from opposite ends of fold line 46 longitudinally inward of the panel 42 and in convergent relation with each other, terminating in a transverse fold 59. Thus, the portion 60 of panel 42 intermediate weakened lines 57 and 58, is swingable out of the plane of panel 42, upon severance of lines 57 and 58, about a hinge axis of fold 59.

Extending along each severance line 57 and 58, just outward of panel portion 60, are a pair of relatively non-adhesive surface areas or zones 61 and 62. The zones 61 and 62 each extend from the distal end of the respective adjacent projection 48 and 50, to the adjacent end of fold line 59, and may be coated with relatively non-adhesive material, such as varnish or the like.

Extending from the fold line 19 of panel 16 is a flap or ear 64. The ear 64 extends from the fold line 19 to the adjacent side edge of tab 52. Formed in the ear 64 are a pair of spaced weakened portions or severance lines 65 and 66, each extending from spaced locations along the fold line 19, generally normal thereto, to the adjacent edge of tab 52. The fold 19, between the severance lines 65 and 66 is also severable, as at 67, to define between the severance lines a severable portion 68.

A generally rectangular panel 70 extends from the fold line 28 of panel 25, being generally coextensive therewith. The panel 70 is bounded on its outer side by an edge 71 parallel to the fold line 28, and bounded at one end by an edge 72 in alignment with the fold line 26. Adjacent to the fold line 17, the panel 70 is bounded by an edge 73 in substantial alignment with the fold 17 and terminating at its opposite ends adjacent to and spaced from the respective fold 28 and edge 71. From opposite ends of the edge 73 there extend generally convex edges 74 and 75, respectively terminating at the fold line 28 and edge 71. The convex edges 74 and 75 define therewithin projections 76 and 77 extending in spaced relation beyond the edge 73 on opposite sides of the free end of tab 52.

The panel 70 is further formed with a pair of generally parallel severance lines or weakened portions 51 and 63 extending in substantial parallelism inward of the panel from opposite ends of the edge 73. At the inner termini of severance lines 51 and 63 there may be provided a fold line 69 extending between the severance lines. Thus, bounded within the severance lines 51 and 63, and between the fold line 69 and edge 73, there is defined a portion 78 of panel 70 swingable relative to the panel about fold line 69 upon severance of lines 51 and 63.

In addition, an ear or tab 79 extends from the fold line 32 of panel 29.

In the assembled or set-up condition of blank 10, the panels 11, 16, 25 and 29 are swung about fold lines 13, 17 and 26 to define peripherally extending side walls, and the glue flap 33 is adhesively secured to the panel 11, along the edge 12. Further, the tabs 40 and 41 are swung inwardly about folds 18 and 31, while the panels 35 and 39 are swung inwardly about their folds 14 and 27, the panel 39 being adhesively secured in overlying relation with respect to the panel 35, and the ears 37 being swung upwardly and adhesively secured to the

adjacent side-wall panels 16 and 29, as seen in FIGURES 2 and 3. The tabs 40 and 41 may be adhesively secured to the underside of panel 35. In this manner, the panels 35 and 39, and flaps 18 and 41 combine to define a bottom wall for the set-up container 80 of FIGURES 2-6.

At the upper end of the container 80, the flaps 64 and 79 are swung inwardly, while the panel 42 is swung inwardly about its fold line 15 and the panel 70 is swung inwardly about its fold line 28 into overlying relation with the panel 42. The flaps 64 and 79 may be adhesively secured to the underside of panel 42. Adhesive means are employed to adhesively secure the panel 70 in its overlying relation with the panel 42, whereby the panels 70 and 42 combine to define upper and lower or outer and inner layers of a top wall for the container 80. Adhesive may be applied over substantially the entire inner surface of panel 70, and the latter applied to the outer surface of inner panel or layer 42 for adhesive securement to the latter, except in the nonadhesive zones 61 and 62.

It will now be appreciated that the projections 76 and 77 respectively overlie projections 48 and 50, being generally congruent thereto, and are adhesively secured in their overlying relation to define double-thickness projections.

It will now be apparent that the panel portion 78 of panel 70 overlies and is secured in facing engagement with the portion 60 of panel 42, except for the unsecured zones 61 and 62. Further, the tab 52 extends downward from fold line 46 and is detachably adhesively secured to the adjacent portion of panel 16 which defines a side wall of the container 80. The detachable securement of tab 52 is to the coated side-wall region 20, as at the spots 21. In this manner, the container 80 is effectively sealed, and its contents protected until the container is opened.

Opening of the container may be very simply accomplished by manual grasping of the tab pull portion 56 to detach the tab 52 from the side wall 16 and swing the tab upward about its fold line 46. Upon upward swinging of tab 52 into generally coplanar relation with the top-wall panels or layers 42 and 70, the tab wings 53 and 54 are displaced outward of the projections 77, 48 and 76, 50, so that the wings are not retained by the projections. Thus, upon further upward swinging movement of the tab 52, the portion 60 of inner top-wall layer 42 will be swung upward about fold line 59, as by severance of weakened lines 57 and 58; the flap portion 68 swinging upward with and being adhesively secured on the underside of the portion 60, upon severance of lines 65, 66, and 67, and the portion 78 of outer layer or panel 70 will also be swung upward by its securement in overlying relation with the panel portion 60. That is, severance will be effected of lines 51 and 63 to swing the panel portion 78 with the panel portion 60, the zones 61 and 62 being unsecured to the panel portion 78. As the severance lines 57 and 58 are spaced laterally apart generally less than the lateral spacing of the severance lines 51 and 63, the panel portion 78 will extend laterally beyond the panel portion 60 to overlie the zones 61 and 62, except when the tab 52 is swung upwardly beyond the top wall, as in FIGURE 3.

That is, FIGURE 3 illustrates the open condition wherein the contents of container 80 may be dispensed through the opening between severance lines 57 and 58.

Reclosure is effected by merely swinging the panel portion 60 about its fold line 59 into position between the zones 61 and 62, in which condition the panel portion 78 overlies the zones 61 and 62 to provide a highly effective and protective closure of the container opening. Further, the tab 52 is swung downward below the projections 48, 77 and 50, 76, along the container side wall 16, as seen in FIGURES 4 and 5. It will there be observed that the wings 53 and 54 of tab 52 extend laterally outward into position beneath respective projections 48, 77 and 50, 76, so as to be retained thereby against unintentional opening of the container. Of course, opening may be

effected in the same manner as described hereinbefore, however it will not be necessary to again sever the severance lines.

From the foregoing, it is seen that the present invention provides a reclosable dispensing container which fully accomplishes its intended objects and is well adapted to meet practical conditions of manufacture, setup, filling and use.

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 claims.

What is claimed is:

1. A reclosable container comprising: a bottom wall; a plurality of side walls upstanding from said bottom wall extending about the periphery thereof; a top wall extending across the upper ends of said side walls, said top wall comprising a pair of inner and outer layers adhesively secured in overlying relation; a pair of spaced retainers projecting from at least one of said layers of said top wall, generally coplanar therewith, beyond the adjacent side wall; a tab extending from said inner layer of said top wall between said retainers and hingedly connected to said layer for swinging movement through the space between said retainers; said inner and outer layers of said top wall being formed with severance lines extending inwardly from opposite sides of said tab, the top-wall portion between said severance lines defining a closure openable upon severance of said severance lines for swinging out of the plane of said top wall; said tab being movable with said closure; wings on said tab for movement therewith into and out of retaining engagement beneath said retainers; and said wings being in edge-to-edge conform-

ing engagement with said retainers when coplanar therewith.

2. A reclosable container according to claim 1, a pair of spaced retainers projecting from both of said inner and outer layers.

3. A reclosable container according to claim 2; the severance lines on said inner layer being spaced laterally inward of the severance lines on said outer layer, thus to define a shelf portion on said inner layer; the laterally extending portion of said outer layer being unsecured to the shelf portion of said inner layer for overlapping closing relation therewith.

4. A reclosable container according to claim 2, said tab being hingedly connected to said top wall at a location inward of the projecting ends of said retainers, for swinging movement of said wings into and out of said retaining engagement beneath said retainers.

5. A reclosable container according to claim 2, said tab being detachably secured in overlying relation with said adjacent side wall.

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