Jan. 1, 1957 S. DERMAN 2,776,083

KNOCKDOWN CONTAINER

Filed Dec. 22, 1953

Fig. 1.

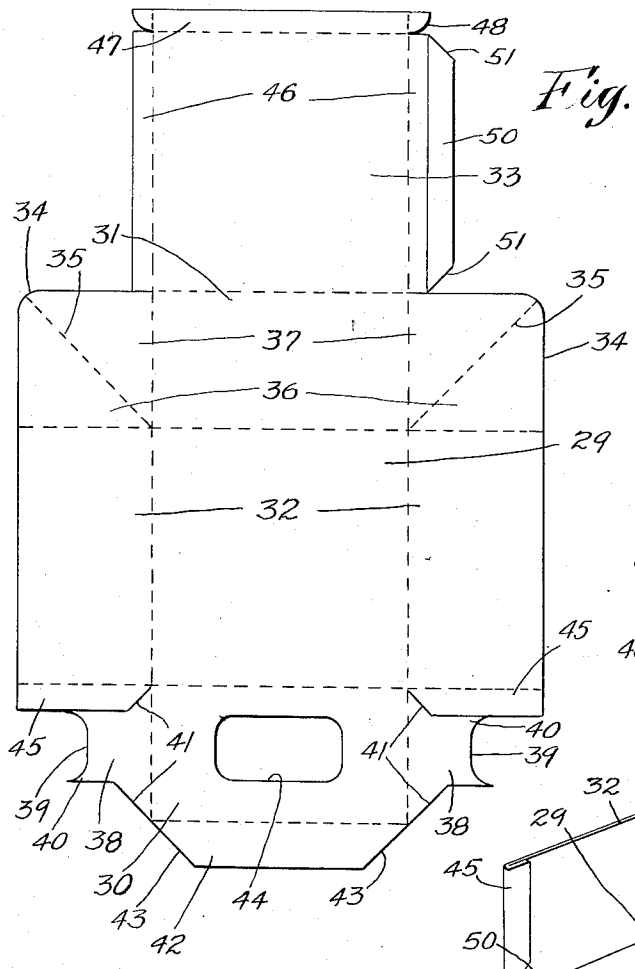


Fig. 2.

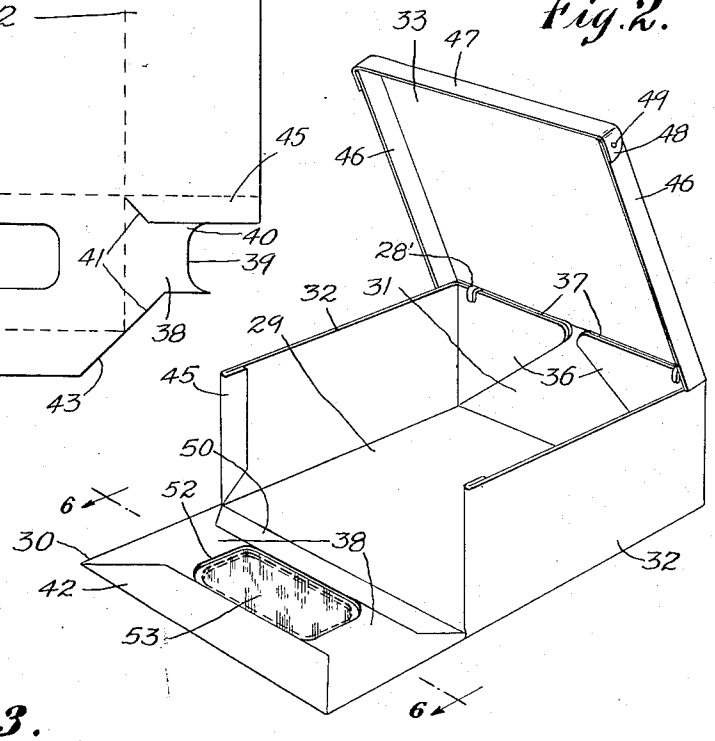
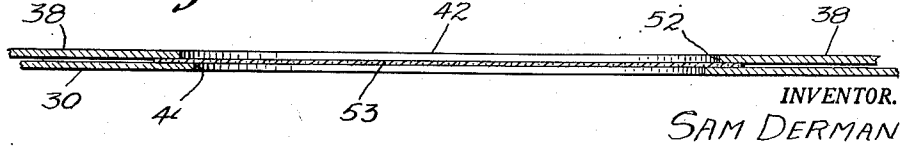


Fig. 3.



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KNOCKDOWN CONTAINER

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3 Claims. (Cl. 229—41)

This invention relates to containers for use in storage of articles of various kinds and classes commonly referred to as chests, boxes and the like. More particularly, the invention deals with an article of manufacture of the type and kind, the body portion of which is fashioned from a single sheet of material cut and scored in such manner as to facilitate compact packaging for shipment and storage while, at the same time, facilitating quick and easy assemblage.

The novel features of the invention will be best understood from the following description, when taken together with the accompanying drawing, in which certain embodiments of the invention are disclosed and, in which, the separate parts are designated by suitable reference characters in each of the views and, in which:

Fig. 1 is a plan view of a blank which I employ for producing a hat box, or similar storage receptacle the blank being shown in extended position.

Fig. 2 is a perspective view of a partially assembled hat box, with the front wall and cover wall in extended positions; and

Fig. 3 is a longitudinal partial sectional view on the line 6—6 of Fig. 2 on an enlarged scale.

In the drawing I have shown one adaptation of the box, or container, which is so constructed as to provide a drop front wall, giving quick access to the interior of the container, thus adapting the container for use on shelves and the like to facilitate removal of articles from the container without removing the container from the shelf.

With the structure shown I provide a blank, as noted in Fig. 1, which is die cut and scored to form a bottom wall 29, a front wall 30, a back wall 31, side walls 32, a top wall 33, and rectangular portions 34. The portions 34 are positioned only between the back wall 31 and the side walls 32 and are divided by diagonal score lines 35 into two triangular portions 36 and 37, the portions 36 being foldable with respect to the rear edges of the side walls 32; whereas the portions 37 are foldable with respect to side edges of the back wall 31. At this time, it will be pointed out that the parts 37 are secured to the back wall 31 by fasteners not shown. It will appear from Fig. 2 that clips 28' are employed to secure the parts 36 and 37 in assembled relationship to each other.

In forming the blank shown in Fig. 1, the front wall 30 includes inwardly foldable supplemental wall portions 38, having curved free edges, as at 39, on what may be termed reduced portions 40 of said members. At the base of the reduced portions are bevelled edges 41. Also foldable with respect to what is the upper edge of the front wall 30 is a flap 42, having bevelled edges 43 at the ends thereof. In forming the wall 30, at least in some adaptations of my invention, an oblong rectangular aperture 44 will be blanked therefrom to produce a window to give visibility to the interior of the resulting box.

In forming the side walls 32, foldable flaps 45 are formed at the forward edges thereof, these flaps being adapted to extend inwardly upon inner surfaces of the side walls 32 to reinforce the front edges to receive the

abutment of the front wall when moved into closed position.

The top wall or cover 33 includes foldable side flanges 46 and a foldable end flange 47, the latter having, at its ends, foldable flaps 48, the latter being secured to the flanges 46 by fastener devices, as at 49, note Fig. 2 of the drawing.

In forming the blank, shown in Fig. 1, an elongated strip 50 is blanked-out adjacent one of the flanges 46, the strip having bevelled ends, as at 51. This strip is pasted on the inner surface of the front wall 30, as noted in Fig. 2 of the drawing, in the operation of pasting the flange 42, as well as the supplemental walls 38 in position. When this operation is completed, an elliptical aperture 52 is formed in registering alinement with the aperture 44 and slightly larger in diameter as is clearly noted in Fig. 3.

Prior to the pasting operation mentioned above, it is preferred that a transparent sheet 53 be secured to the inner surface of the wall 30 with peripheral edges 54 of the sheet overlying peripheral edges of both apertures 44 and 52, as clearly noted in Fig. 3. The sheet 53 can be in the form of a transparent or translucent plastic sheet; whereas, in some instances, a glass panel can be similarly mounted to form a closure for the openings.

With the construction shown it will be apparent that the front flange 47 of the cover 33 supports the front wall 30 in the raised position. Whenever desired, the cover can be raised slightly to clear the wall 30, at which time, this wall can be moved downwardly to give access to the interior of the box or container. This is particularly desirable when the same is used as a hat box and stored upon the shelf of a closet. It facilitates removal of a hat without removing the box from the shelf. The transparency provided facilitates selection of a hat without opening the box.

It will be understood that the box or container is also collapsible within the cover 33 with parts of the bottom and back wall extending beyond the cover forming a relatively thin package, which is greater in one dimension by the depth of the back wall. In other words, the cover and back walls are substantially equal in length to the bottom and front walls. No showing of this collapsed arrangement is made, as it will be quite apparent to those skilled in the art.

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

1. A collapsible container of the character described, comprising a single sheet of material cut and scored to form bottom, front, back and side walls and a top cover, the front, back and side walls being foldable upon the bottom wall, the top cover being foldable upon the back wall, the side and back walls being joined by rectangular portions each foldable with respect to the side walls along a diagonal fold line which divides each rectangular portion into two triangular portions, one of said triangular portions being fixed to the back wall, clips for coupling the other triangular portions with the fixed portions to support the side walls in perpendicular position with respect to the bottom wall, the cover having foldable peripheral flange forming members adapted to overlie the side and front walls of the container, said walls and triangular portions, upon removal of said clips, being collapsible one upon the other in the foldable relationship defined in forming a relatively thin elongated package, said front wall being integrally hinged to the bottom wall and free to swing thereon and having a substantially rectangular elongated opening therein, the front wall having inwardly foldable members at free edges thereof collectively bordering at least three sides of said opening, and an independent elongated strip secured to the inner

surface of the front wall and forming a border for the fourth edge of said opening.

2. A collapsible container of the character described, comprising a single sheet of material cut and scored to form bottom, front, back and side walls and a top cover, the front, back and side walls being foldable upon the bottom wall, the top cover being foldable upon the back wall, the side and back walls being joined by rectangular portions each foldable with respect to the side walls along a diagonal fold line which divides each rectangular portion into two triangular portions, one of said triangular portions being fixed to the back wall, clips for coupling the other triangular portions with the fixed portions to support the side walls in perpendicular position with respect to the bottom wall, the cover having foldable peripheral flange forming members adapted to overlie the side and front walls of the container, said walls and triangular portions, upon removal of said clips, being collapsible one upon the other in the foldable relationship defined in forming a relatively thin elongated package, said front wall being integrally hinged to the bottom wall and free to swing thereon and having a substantially rectangular elongated opening therein, the front wall having inwardly foldable members at free edges thereof collectively bordering at least three sides of said opening, an independent elongated strip secured to the inner surface of the front wall and forming a border for the fourth edge of said opening, and said strip and inwardly folded members having edge portions fitting snugly one within the other.

3. A collapsible container of the character described, comprising a single sheet of material cut and scored to form bottom, front, back and side walls and a top cover, the front, back and side walls being foldable upon the bottom wall, the top cover being foldable upon the back

wall, the side and back walls being joined by rectangular portions each foldable with respect to the side walls along a diagonal fold line which divides each rectangular portion into two triangular portions, one of said triangular portions being fixed to the back wall, clips for coupling the other triangular portions with the fixed portions to support the side walls in perpendicular position with respect to the bottom wall, the cover having foldable peripheral flange forming members adapted to overlie the side and front walls of the container, said walls and triangular portions, upon removal of said clips, being collapsible one upon the other in the foldable relationship defined in forming a relatively thin elongated package, said front wall being integrally hinged to the bottom wall and free to swing thereon and having a substantially rectangular elongated opening therein, a transparency covering said opening, and means fixed to the inner surface only of the front wall to reinforce said wall and to support the transparency thereon.

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