Dec. 31, 1940. D. A. SNYDER 2,227,383

CARTON

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Fig. 1.

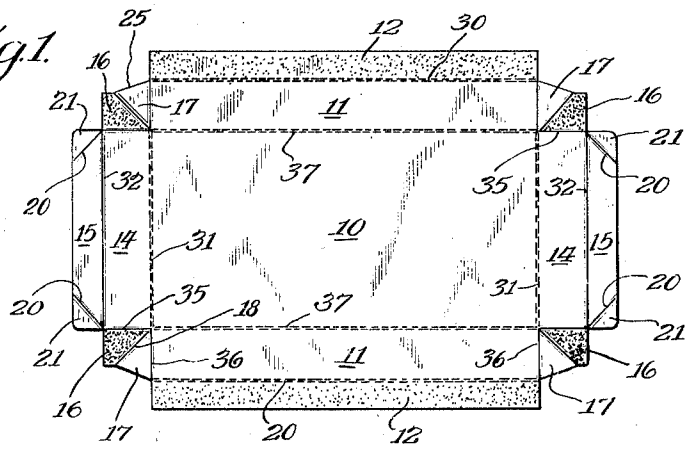


Fig. 2.

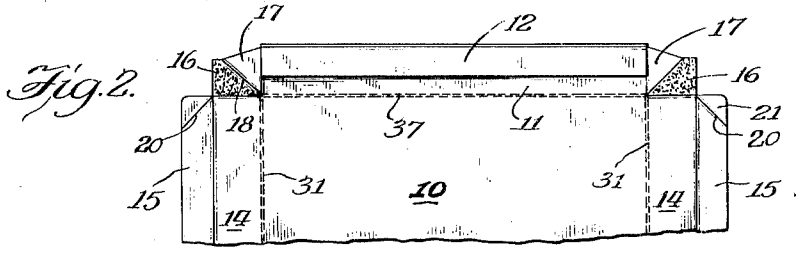


Fig. 3.

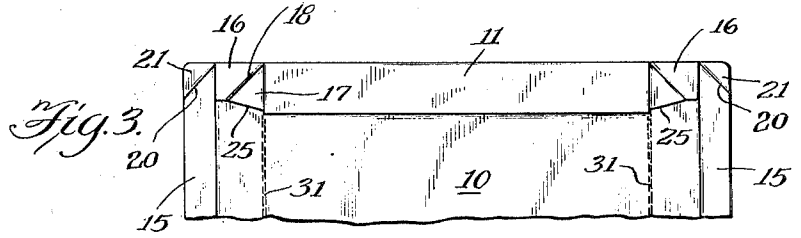
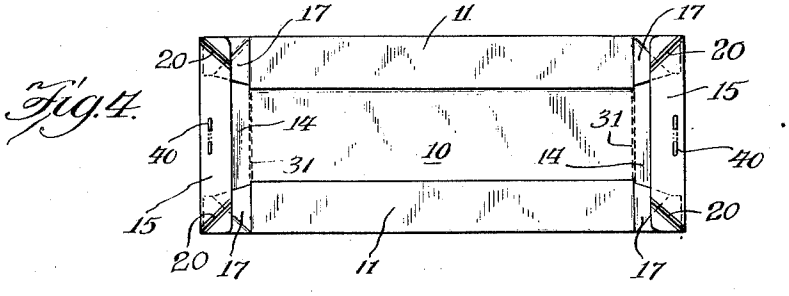


Fig. 4.



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Fig. 5.

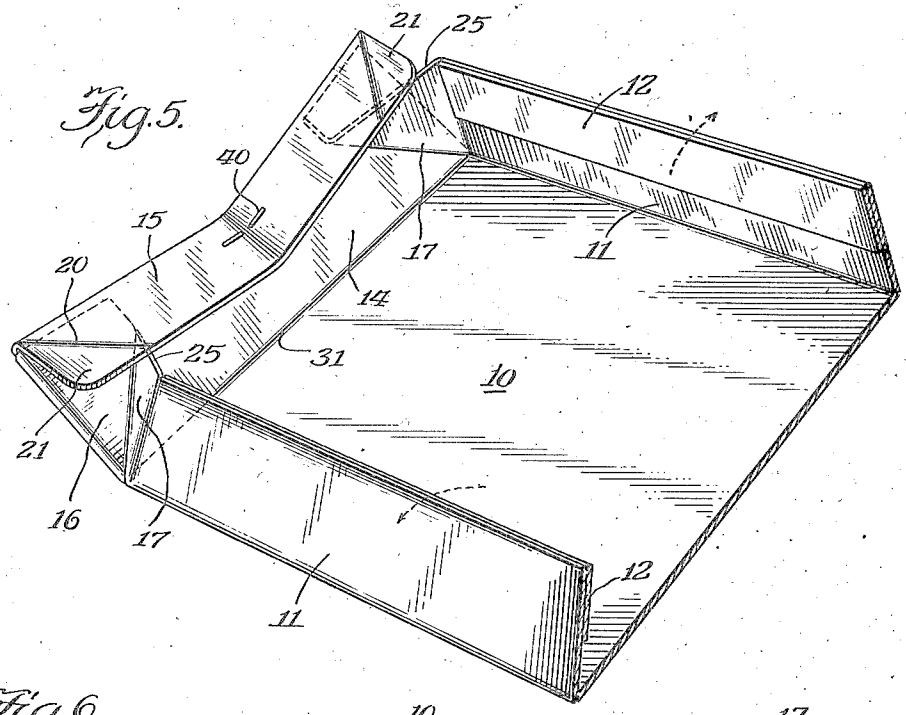


Fig. 6.

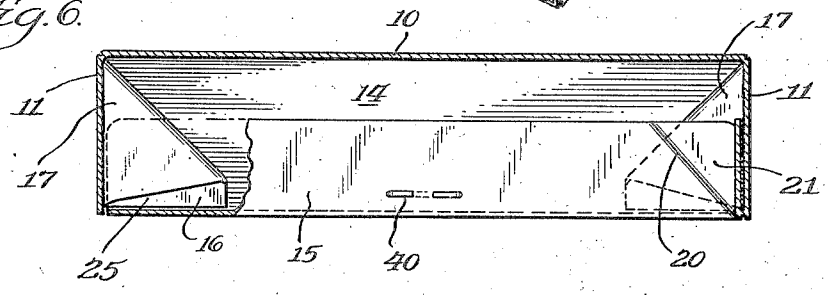
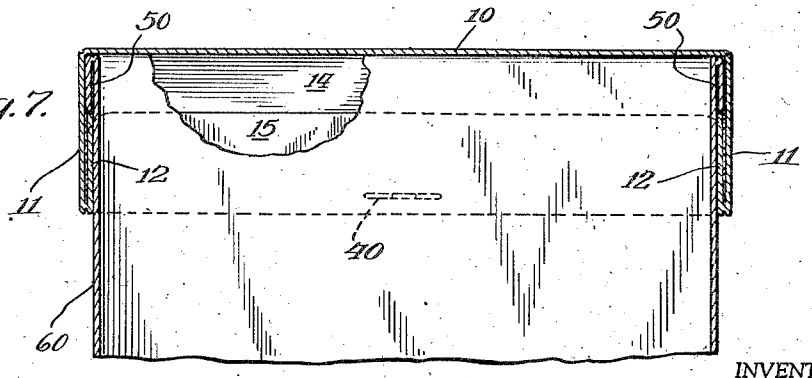


Fig. 7.



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UNITED STATES PATENT OFFICE

2,227,383

CARTON

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Application April 10, 1939, Serial No. 267,131

1 Claim. (Cl. 229—31)

This invention relates to a carton construction adapted to be quickly set up for use from flat knock-down condition.

An object of the invention is to provide a carton constructed from a single blank so scored and shaped as to provide a carton which can be readily set up for use.

Other and further objects of the invention will be apparent from the following specifications and appended drawings.

On the drawings:

Figure 1 is a plan view of the blank from which the carton is made,

Figure 2 is a fragmental plan view of the blank showing one stage in forming the carton from the blank,

Figure 3 is a fragmental plan view of the blank showing a further stage in making the carton,

Figure 4 is a plan view of the completed carton in flat knock-down condition,

Figure 5 is a fragmental perspective view of the carton showing the end walls in partially set-up position,

Figure 6 is a fragmental end view of the carton shown in Figure 5 in set-up position, and

Figure 7 is a fragmental sectional view showing the carton used as a cover.

Referring to the drawings, the carton is constructed from a single blank comprising a bottom panel 10 and side panels 11. Side panels 11 are provided with portions 12 hingedly connected thereto along score lines 30 and adapted to be folded upon the side panels 11 and adhered thereto by glue. End walls 14 are hingedly connected to the bottom panel 10 along score lines 31. Each of the end panels 14 is provided with integrally hinged locking panels 15 connected thereto along score lines 32. Corner portions 16 and 17 are integrally conected by score lines 35 and 36 to end panels 14 and side panels 11, respectively. Corner portions 16 and 17 are integrally connected along score lines 18.

Locking panels 15 are scored at each corner portion thereof along lines 20 as indicated in the drawings. The outer edges of each of the corner portions 21 are rounded in contour, as shown in the drawings, for a purpose to be later described. The outer free edge portion 25 of corner portions 17 are cut away at an angle inclined to the wall portion 11 for a purpose which will be later described.

In constructing the carton from the blank, the panel portions 12 are folded over on the inner face of side panels 11 as shown in Figure 2 and secured thereto by a suitable adhesive. The side panels 11 are then folded over along score lines 37 against the bottom panel 10 as shown in Figure 3 and the corner portions 16 are then affixed by means of a suitable adhesive on the inner faces of corner portions 16 to the contacting portions of the end panels 14. The locking flaps are then folded over as shown in Figure 4 and stapled at a suitable point, preferably at the medial portion, by means of metal staples 40. The carton is now in completed condition ready for use.

In order to set up the carton, the end panels 14 are grasped, one in each hand, and bent up along score lines 31 so as to be positioned at right angles to the bottom panel 10, as shown in Figures 5 and 6. During such operation the locking panel 15 will be positioned upon the inside of the carton, thereby locking same firmly into place. The locking operation is facilitated by the construction of the locking panels 15. As the locking panels 15 are folded inside the carton the score lines 20 at the corner portions thereof are sufficiently yielding so as to permit the corners to slide past the free edges 25 of corner portion 17 and into a locking position. The rounded outer corner portions of the locking panels also facilitates sliding the locking panel into set-up position.

In accordance with the invention herein disclosed a carton construction is provided which may be readily set up by merely folding over the locking panels whereby they are firmly retained in position. The present carton construction may be utilized either as a tray or for any other suitable purposes. If desired this carton may be used as a cover for closing the ends of a carton 60 as illustrated in Figure 7. In such case the glued panel portions 12 serve to lock with glued portions 50 provided on the carton 60, thereby firmly securing the cover in position.

It is to be understood that numerous modifications and changes may be made in the invention without departing from the spirit thereof and it is intended to cover such modifications in the appended claim.

I claim:

A knocked-down carton in flat folded condition for quick set-up comprising a bottom wall, side walls, and end walls, locking panels having a length substantially equal to the length of said end walls and a width substantially less than the width of said end walls and hingedly connected to said end walls, said locking panels being folded upon said end walls and fastened thereto only at a medial region while said carton is in knocked-down condition, hinged integral corner connections between the said side walls and end walls, the free edge of the corner portions adjacent the said side walls being inclined toward said end walls, a score line positioned diagonally across each free corner of the locking panels to provide yieldingly hinged corner portions, whereby when the locking panel is folded into locking position said corner portions will slide over said inclined edge portion and into engagement with the said side walls.

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