May 27, 1958 W. P. DANIELS 2,836,338

TELESCOPIC SHIPPING CARTON

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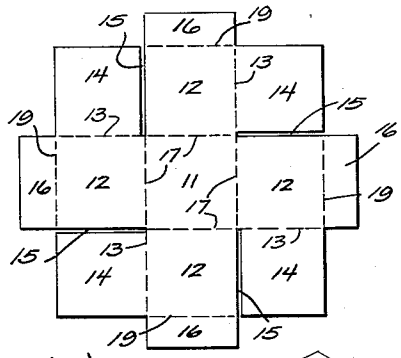


Fig. 1

Fig. 2

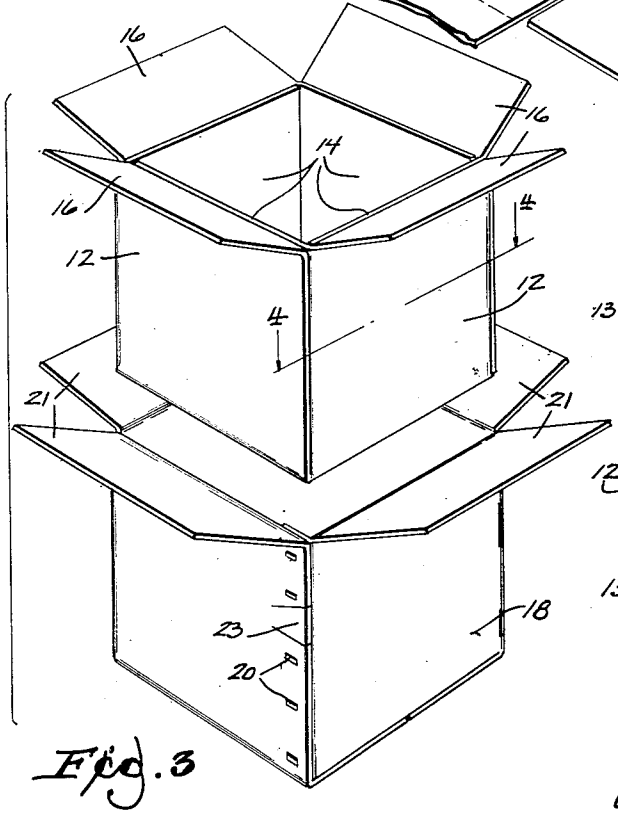


Fig. 3

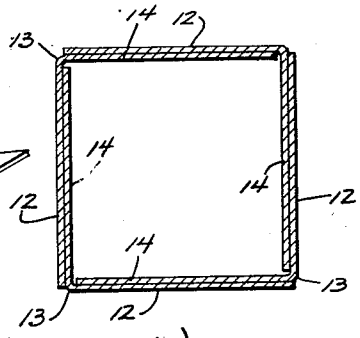


Fig. 4

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TELESCOPIC SHIPPING CARTON

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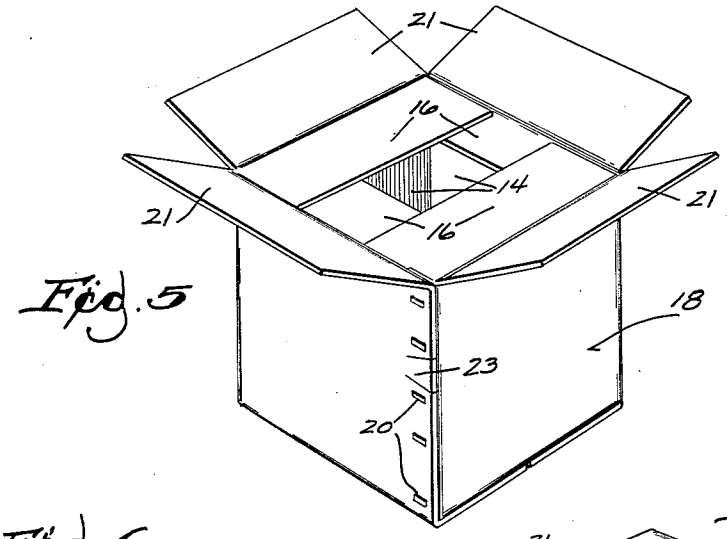


Fig. 5

Fig. 6

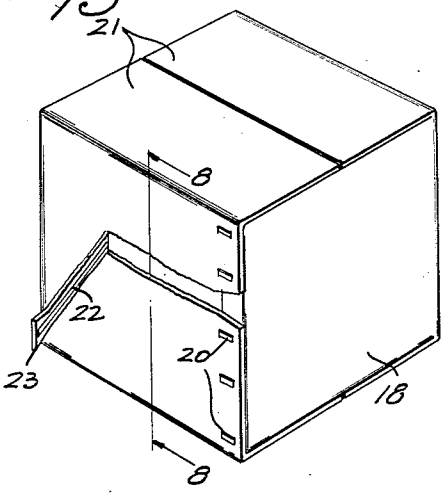
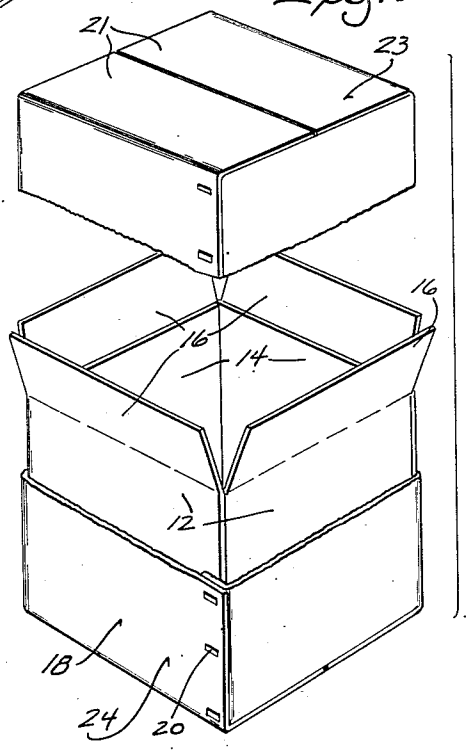


Fig. 7



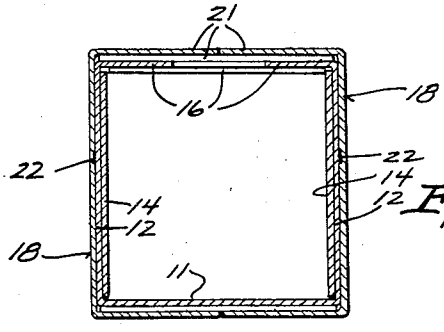


Fig. 8

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TELESCOPIC SHIPPING CARTON

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Application March 25, 1955, Serial No. 496,837

3 Claims. (Cl. 229—14)

This invention relates to a telescopic shipping carton and particularly to a novel inner liner therefor which has interleaved panels and flaps.

An object of the invention is to provide a relatively inexpensive disposable paperboard container for heavy high density merchandise such as nails, rivets, washers, etc., which heretofore have been shipped in costly wooden kegs and the like. In the paperboard carton of the present invention, the combination of an inner liner and outer carton in which the inner liner is telescoped provides container walls of triple thickness.

The inner liner is desirably formed from a single sheet of carton stock and is regular in form whereby to result in little waste. When erected the panels and panel flaps of the inner liner are interleaved to provide multiple thickness walls. It is unnecessary to staple or glue the flaps of the inner liner as its erected form is maintained by the outer carton in which the liner is telescopically inserted.

The outer carton is desirably provided with a tear strip for severing the carton into top and bottom portions. The bottom severed portion remains in confining relation about the inner liner to maintain the form and shape of the inner liner. The top severed portion serves as a replaceable closure which fits over the top of the inner liner. Accordingly, the carton of my invention may be used as a substitute for a nail keg, etc., and its contents may be periodically dispensed and stored at the place of use.

The walls of my assembled paperboard carton are strong enough to confine high density merchandise during their dispensing period and the carton may be discarded thereafter without substantial economic loss.

Other advantages and features of the invention will be more apparent upon examination of the following disclosure in which:

Fig. 1 is a developed plan view of the blank from which the inner liner is formed.

Fig. 2 is a greatly enlarged perspective view of the blank of Fig. 1, portions of the side panels and panel flaps being folded in the course of erecting the inner liner.

Fig. 3 is a perspective view in spaced apart relation of an inner liner and its telescopic shipping carton.

Fig. 4 is a cross sectional view taken along the line 4—4 of Fig. 3.

Fig. 5 is a perspective view of the assembled shipping carton and inner liner.

Fig. 6 shows the carton of Fig. 5 completely sealed and with the tear strip partly opened in the course of severing the outer carton into upper and lower portions.

Fig. 7 is a perspective view showing the top severed portion of the outer container removed and illustrating its function as a replaceable closure for the carton.

Fig. 8 is a cross sectional view taken along the line 8—8 of Fig. 6.

The inner liner of the device of the present invention is advantageously formed from the carton blank shown in Fig. 1. The blank includes a bottom panel **11** having hingedly connected to its margins **17** substantially identical side panels **12**. To their corresponding scored margins **13** side panels **12** have hingedly connected side panel flaps **14**. The blank is cut at **15** to physically disconnect panel flaps **14** from adjacent side panels **12**. Side panels **12** may also be provided with top fold flaps **16** hingedly connected to the margins **19** of the panels.

To erect the inner liner, panels **12** are pivoted on their hinged connections **17** to upright position, their flaps **14** being concurrently lifted and interleaved as shown in Figs. 2, 3 and 4 with next adjacent side panels **12**. As hinge connections **13** and **17** are at right angles the erected inner liner will assume a cubical form as shown. As the panels and flaps are interleaved, the assembled inner liner has side walls of double thickness, each side wall comprising a panel **12** and a flap **14** in face relation. The hinges **13** are disposed at the corners of the erected inner liner and bridge from one double thickness wall to the next double thickness wall.

The inner liner is then positioned in an outer carton **18** having its walls rigidly positioned by means of the staples **20** at the manufacturer's joint. No stitching, gluing or staples are needed to hold the inner liner because when the inner liner is telescopically received in the outer carton **18** its panels and flaps are confined and held by the walls of the outer liner in assembled relation. After the inner liner is inserted into the outer carton **18** the side walls of the composite unit have triple thickness as best shown in Fig. 8.

The outer carton is provided with closure flaps **21** which may be adhesively sealed one to the other as indicated in Fig. 6 to complete the carton for shipping purposes after it is loaded with merchandise.

Outer carton **18** is also desirably provided with a tear strip **22** having a tear tab **23** at the manufacturer's joint. The tear strip extends laterally completely around the walls of the outer carton. To open the container the tear tab **23** is grasped in the fingers and pulled to sever the outer container into top and bottom portions **24**, **25** as shown in Fig. 7. The top portion **24** then comprises a replaceable closure, the bottom portion **25** remaining in confined relation about the inner liner to hold the inner liner erected. As the container contents are dispensed the closure **24** may be removed and replaced. When the carton contents are used up the entire carton may be discarded.

I claim:

1. A telescopic shipping carton comprising a liner having a bottom panel, side panels hingedly connected to the margins of the bottom panel, and panel flaps hingedly connected to side panel margins which are at right angles to the hinged margins of the bottom panel, whereby said panel flaps interleave with next adjacent side panels but are unconnected thereto to form double-ply side walls in the assembled liner, in combination with an outer carton in which said inner liner is telescopically enclosed, said outer carton constituting the sole means for holding the panels of the liner in interleaved relation and having walls fixedly connected and in support relationship to the otherwise unfastened panels of the inner liner.

2. The device of claim 1 in which said outer carton is provided with a tear strip extending laterally across its walls for severance of the carton into top and bottom portions on the line of said tear strip, the bottom portion of said severed carton remaining in support relationship to the inner liner and the top portion of said severed carton comprising a removable closure for the inner liner.

3. A telescopic shipping carton comprising an inner liner having a bottom panel and side panels hingedly con-

nected to the margins of the bottom panel, and panel flaps, said side panels respectively having spaced parallel side margins normal to the hinged margins of the bottom panel, corresponding side panel margins at one side of said panels being free and opposite corresponding side panel margins having hinged connections to said panel flaps, said side flaps being disposed at right angles to the side panels to which they are hinged and interleaved and in face relation with next adjacent side panels to form double-ply walls for the inner liner, in combination with an outer carton within which said liner is telescopically enclosed, said outer carton constituting sole means for holding the panels of the inner liner in interleaved relation and having sealing flaps foldable about the inner liner whereby said inner liner is totally enclosed within

said carton and its otherwise unfastened panels supported in interleaved relation, the walls of the outer carton, together with the double-ply walls of the inner liner, comprising triply-ply side walls for the contents of the inner liner.

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