

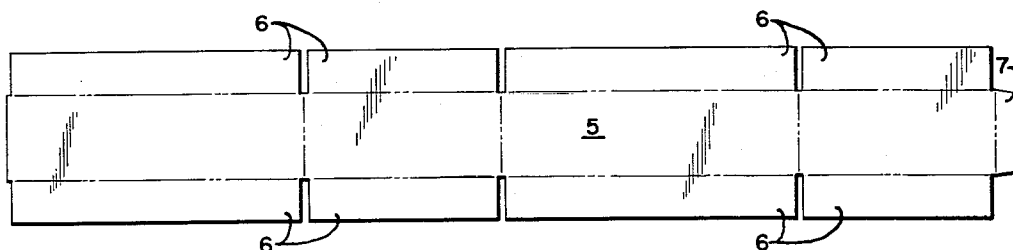
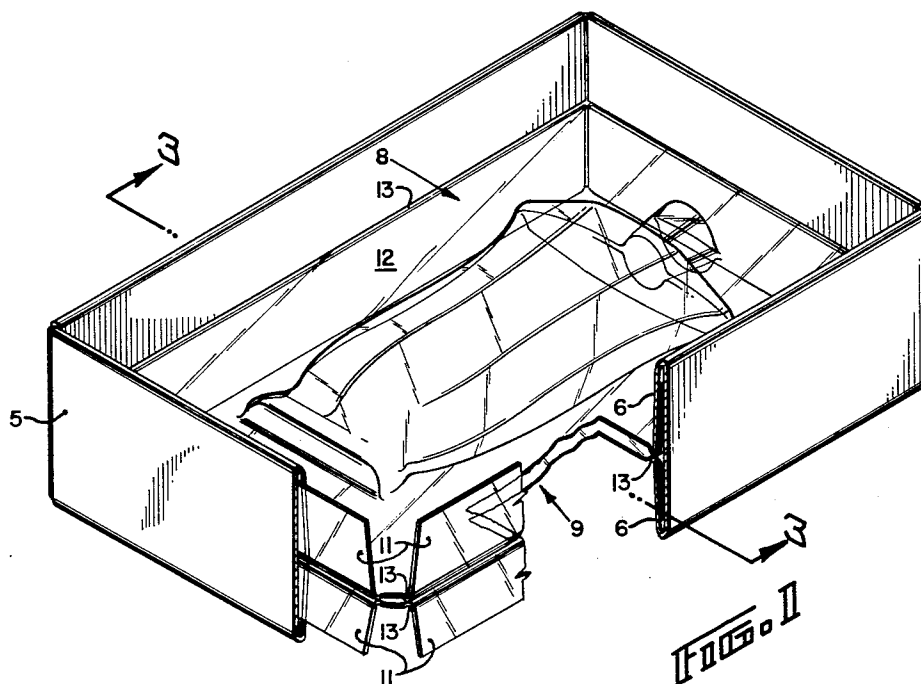
July 25, 1961

O. W. STONE ET AL
PACKAGE WITH ARTICLE-HOLDING INSERT SUSPENDED IN AN
OPEN-FACED PAPERBOARD FRAME

2,993,587

Filed Aug. 2, 1957

2 Sheets-Sheet 1



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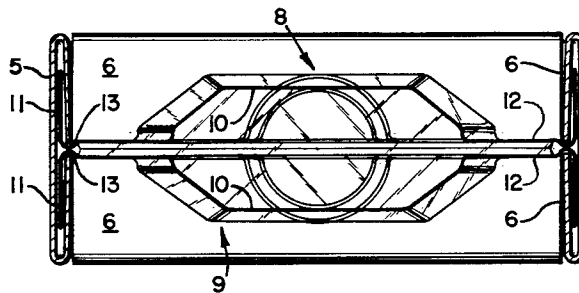


FIG. 3

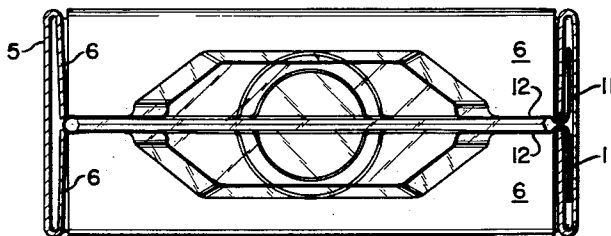


FIG. 4

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PACKAGE WITH ARTICLE-HOLDING INSERT SUSPENDED IN AN OPEN-FACED PAPERBOARD FRAME

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2 Claims. (Cl. 206—45.19)

The invention relates to packages for articles of various descriptions, and has special application, for example, to the packaging of bottles and products contained in bottles.

According to our invention, the article to be packaged is held between two sections of a package insert such as may be made of vacuum formed plastic sheets having recesses shaped to receive the article. The insert has flanged edges and is received in a paperboard frame having marginal flanges which fold inwardly so their edges engage and hold the insert. The infolded flanges of the frame also engage the flanges of the insert. Additionally, the insert is shouldered, or grooved, to hold the infolded flanges of the frame. The construction is such that the insert and frame are self-locking, each holding the other in a manner to achieve surprising rigidity while nevertheless leaving the insert in substantially full view within its slim double-thickness paperboard frame. Thus, when the material selected for the insert is a transparent plastic, the package becomes useful for display purposes, for its contents remain in plain sight. The article is seen in its transparent wrapping as suspended in the paperboard frame. The strength of the composite package, however, belies the seeming fragility of the plastic suspension. The double flanges of the frame, reinforced and held as they are by the double flanges of the insert, create crushing strength where it is most effective and utilizes the strength characteristics of the paperboard in a most economical way; for only a small amount of paperboard stock is required, and as the paperboard blank is rectangular in form there is an absolute minimum of wastage. Other objects and advantages will appear as the description proceeds.

In the drawings:

FIG. 1 is a cutaway perspective view of our improved package in one of its preferred forms.

FIG. 2 shows the blank from which the paperboard frame is formed.

FIG. 3 is a transverse sectional view taken as indicated at 3—3 in FIG. 1.

FIG. 4 is a view similar to FIG. 3, showing a modified construction in which the two sections of the plastic insert are hinged together along one side.

Referring to the drawings, we shall now describe the best mode contemplated by us for carrying out our invention. Our packaging device comprises a continuous paperboard band 5 having marginal flanges 6 around its edges. This paperboard blank from which this band is made, may be cut and scored with conventional cutting and scoring dies well known in the paper box business, then glued up in flat folded form with use of the usual glue lap 7 and erected by bending along the fold lines furnished by the scoring which in FIG. 2 is indicated by the dot-dash lines. The insert comprises mating sections 8 and 9 which may be made of a transparent plastic material. These mating sections have complementary article-receiving recesses 10, and flanges 11 extending into spaces between the inside of the paperboard band 5 and its infolded flanges 6. The two sections 8 and 9 of the insert may be made either separate, FIG. 3, or as one piece hinged together at one side, FIG. 4. Flanges 11 of the insert in either case should extend along at least two op-

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posed sides. In the embodiment of FIG. 3, these flanges preferably extend along all four sides of the insert; in FIG. 4 along three sides, omitted on the hinged side. More specifically the insert, which as we have seen includes the means for holding the article to be packaged, has flat portions 12 extending laterally into proximity with the inner surface of the paperboard band and terminating along at least two opposed sides in the flanges 11, these flanges extending in substantial parallelism with the adjacent sides of the paperboard band. The flanges 6 of the paperboard band in the completed package are folded inwardly through substantially 180° and the edge portions thereof are in holding engagement with the laterally extending portions 12 of the insert. Side portions of flanges 6 overlie the flanges 11 of the insert so that the flanges of the insert are enclosed in pockets formed between the paperboard band and its infolded flanges, the paperboard band then forming a frame for the insert and the article packaged.

The laterally extending portions 12 of the insert have shoulders such as may be formed by the insides of grooves 13 at the bases of the flanges 11. These shoulders, or grooves, engage edge portions of the infolded flanges 6 of the paperboard band to restrain them in their infolded position. That is, the flanges 6 extend into the grooves 13 once the band and its insert have been assembled.

The packaging operation is simple. The flat folded paperboard band is squared up and dropped over the insert with its contained product, and flanges 6 tucked inwardly until they snap into grooves 13. Or, using the two piece insert, one piece is assembled with the band, the article put into its recess, the second insert piece dropped over it, and flanges 6 snapped into the grooves of the insert as before.

The terms and expressions which we have employed are used in a descriptive and not a limiting sense, and we have no intention of excluding such equivalents of the invention described, or of portions thereof, as fall within the scope of the claims.

We claim:

1. A packaging device comprising a rectangular paperboard band having four flat outer walls with upper and lower edges defining spaced substantially parallel planes, a separate flap extending from each edge of each of said walls at fold lines defining the edges of said walls, and an insert received within said paperboard band, said insert comprising a pair of juxtaposed sheets having edge portions in substantially face contact relationship and extending into proximity with the inner surfaces of said band and terminating along at least two opposed sides in flanges extending in substantial parallelism with adjacent inner walls of the band, said sheets having preformed recesses to receive an article to be packaged, said recesses being disposed between said spaced planes, and the flaps of the band in the completed package being separately folded through substantially 180° and having end portions thereof in holding engagement with said juxtaposed sheets.

2. A packaging device in accordance with claim 1 in which said juxtaposed sheets have shoulders in proximity to said band, said shoulders engaging end portions of the infolded flaps of the band to lock them in their infolded position.

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