Aug. 16, 1960 M. J. COE 2,949,222

CARTONS AND COVERS THEREFOR

Filed April 2, 1959

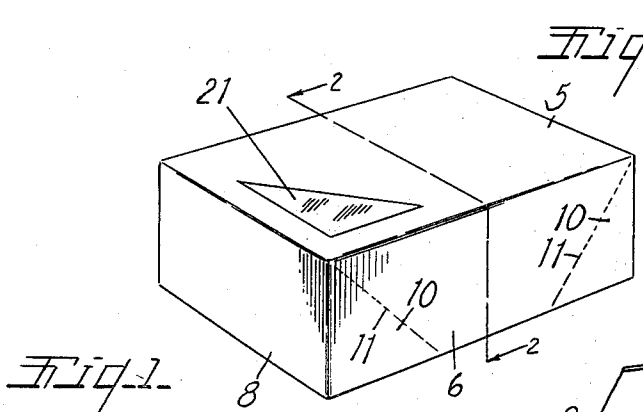


Fig. 1.

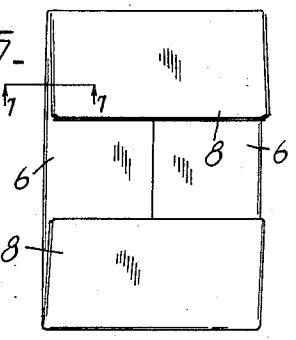


Fig. 6.

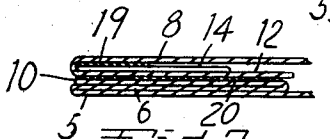


Fig. 7.

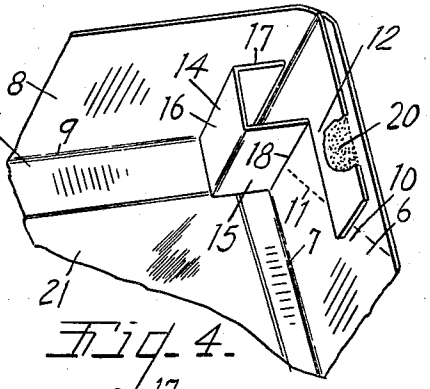
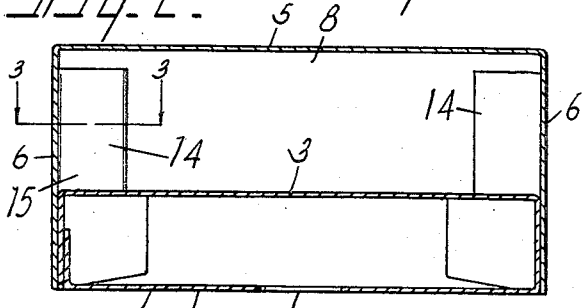


Fig. 4.

Fig. 2.



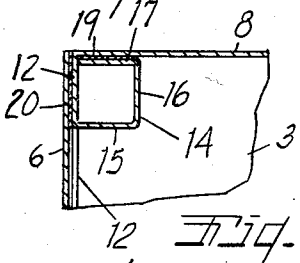


Fig. 3

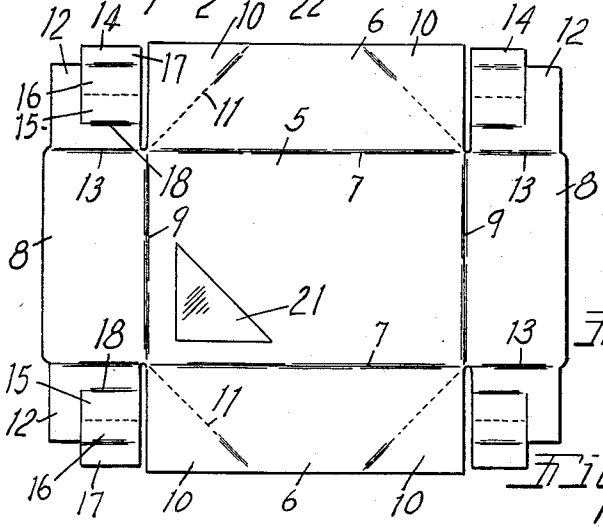


Fig. 8.

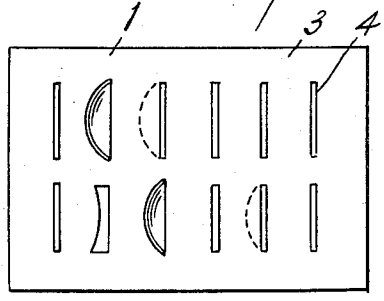


Fig. 5.

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CARTONS AND COVERS THEREFOR

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6 Claims. (Cl. 229—41)

This invention relates to cartons and covers therefor which are well adapted for the packaging of materials which it is desirable to support in non-contacting relation to the bottom, top and side walls.

The main objects of this invention are,

First, to provide a carton of the collapsible type which includes a bottom member having vertically spaced bottom and top walls and a cover embracing and supported upon the bottom member with the top of the cover substantially spaced from the bottom member.

Second, to provide a carton having these advantages which may be compactly collapsed.

Third, to provide a carton cover member provided with bottom member engaging corner posts which are automatically adjusted to erected position upon the erecting of the side walls of the cover member and which are automatically collapsed upon the collapsing of such walls.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of a carton embodying my invention.

Fig. 2 is a vertical transverse section on a line corresponding to line 2—2 of Fig. 1.

Fig. 3 is a fragmentary view in horizontal section on a line corresponding to lines 3—3 of Fig. 2.

Fig. 4 is an inverted fragmentary perspective view of one corner of the cover member, parts being broken away to show structural details.

Fig. 5 is a conventionalized plan or top view of the bottom carton member.

Fig. 6 is an inverted view of the cover member collapsed.

Fig. 7 is an enlarged fragmentary view on a line corresponding to line 7—7 of Fig. 6.

Fig. 8 is a plan view of the blank from which the cover is formed, all of the parts being shown in extended position.

The embodiment of my invention illustrated is designed for the packaging of a plurality of small articles which it is desirable to support individually and at the same time guard them against external blows. I have not illustrated any article to be packaged, but the bottom member, designated generally by the numeral 1, is provided with a bottom wall 2 and top wall 3 vertically spaced therefrom, the top wall being provided with openings 4 which are illustrated as being of different shapes and adapted to receive differently shaped objects, for example items of a child's dishes. However, it should be understood that that is merely one item and that the size and shape of the carton may be very greatly varied.

It is also desired to point out that while in the descriptive matter and certain of the claims the terms "side" and "end" walls are used for the sake of brevity and clarity in designating parts, such terms should not be considered as having any relation to dimensions. The bottom member 1 is not described in detail because structurally it forms no part of this invention other than it has vertically spaced walls which particularly adapts it for uses in which it is desirable to support the articles packaged upwardly of the actual bottom of the carton.

This bottom member is of rectangular shape and is desirably collapsible. The collapsible cover comprises a top 5, side walls 6 hingedly connected thereto at 7, and end walls 8 hingedly connected to the top at 9. These hinge connections are in the form of scores. The side walls have hinging flap portions 10 at each end thereof foldable upon the inner side thereof when the carton is collapsed, as will hereafter more clearly appear. The hinging scores 11 are desirably partially in the form of perforations and partially in the form of plain scoring.

The end walls 8 are provided with corner flaps 12 hingedly connected thereto by the scores 13. These corner flaps are lapped upon and in part adhesively secured to the hinging flap portions 10 of the side walls. The corner flaps have cutout portions or partially severed portions designated generally by the numeral 14, see Fig. 8 and Figs. 3 and 4. These portions 14 constitute post members and comprise hingedly connected sections 15, 16 and 17, these sections resulting from the vertical scoring of the portion 14 which is hingedly connected to the corner flap at 18. The outer or end section 17 of these post members are adhesively secured to the end wall 8 as is indicated at 19, see Fig. 3, the adhesive securing of the corner flap to the hinging flap portions 10 of the side walls being indicaed at 20, see Figs. 3 and 4. With this arrangement when the walls of the cover are swung to erected position the post members are automatically swung to erected position and they are of such length as to engage the bottom member top wall 3, as is illustrated in Fig. 2. The side walls of the cover embrace the bottom member so that lateral sliding movement of the cover is prevented and the cover is supported so that any articles positioned in the top wall of the bottom member are effectively guarded and enclosed.

In the embodiment illustrated the cover is provided with a window 21 which may be of such size and positioned as may be desired. The cover is maintained in its erected position by its engagement with the bottom member and when disengaged therefrom may be collapsed as indicated in Figs. 6 and 7. It is recognized that it is old to provide cartons with collapsible walls associated generally as in the structure of this application, that is, containers in which one pair of opposed walls is provided with hinging flap portions at the ends thereof foldable thereon, and the other pair of opposed walls is provided with corner flaps adhered to the said hinging flap portions.

It is desired to further point out that the corner posts of the applicant's invention when the cover is in erected position and in engagement with the bottom member serve as effective braces for the hinging flap portions of the side walls, and of course also as braces for the end walls, or it may be said that they serve as corner braces for the cover as well as supports for the cover. As is apparent from the blank of Fig. 8, no additional stock is required to provide these supporting and bracing posts or corner members.

As pointed out in practice the proportions of the cartons may be varied to receive the particular material that is packaged, and even when the cartons are of relatively large size they are strong and rigid when in erected position. In the embodiment illustrated the bottom 2 is provided with a pair of finger openings 22 to facilitate manipulation or assembling and disassembling of the bottom member and the cover. A pair of these is desirably provided to receive a thumb and finger.

I have illustrated and described my invention in a highly practical embodiment. I have not attempted to

illustrate various other embodiments or adaptations as it is believed that this disclosure will enable those skilled in the art to embody my invention as may be desired.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent is:

1. A carton comprising an article supporting bottom member of rectangular section and including vertically spaced bottom and top walls, the top wall having article receiving openings therein, and a collapsible cover including hingedly connected top, side and end walls and dimensioned to telescopingly embrace the bottom member and having a vertical width substantially exceeding that of the bottom member, the side walls having hinging flap portions at the ends thereof foldable thereon, the cover end walls having corner flaps hingedly connected thereto and disposed on the inner sides and fixedly secured to said hinging flaps of said side walls, said corner flaps having upper portions thereof projecting therefrom and provided with three laterally spaced vertical post member section defining scores, the outer of said sections being disposed upon and fixedly secured to the end walls so that the post members are automatically erected and collapsed by the erecting and collapsing of the walls, said post members being in supported engagement with said bottom member when the cover is arranged thereon.

2. A carton comprising an article supporting bottom member of rectangular section, and a collapsible cover including hingedly connected top, side and end walls and dimensioned to telescopingly embrace the bottom member, the side walls having hinging flap portions at the ends thereof foldable thereon, the cover end walls having corner flaps hingedly connected thereto and disposed on the inner sides and fixedly secured to said hinging flaps of said side walls, said corner flaps having upper portions thereof projecting therefrom and provided with laterally spaced vertical post member section defining scores, the outer of said sections being disposed upon and fixedly secured to the end walls so that the post members are automatically erected and collapsed by the erecting and collapsing of the walls.

3. A carton comprising an article supporting bottom member of rectangular section and including vertically spaced bottom and top walls, the top wall having article receiving openings therein, and a collapsible cover including hingedly connected top, side and end walls and dimensioned to telescopingly embrace the bottom member and having a vertical width substantially exceeding that of the bottom member, the side walls having hinging flap portions at the ends thereof foldable thereon, the cover end walls having corner flaps hingedly connected thereto and disposed on the inner sides and fixedly secured to said hinging flaps of said side walls, said corner flaps having post member portions integral therewith and hingedly connected thereto and to the end walls in spaced relation to the hinges of the corner flaps thereto, said post members being vertically scored for folding on predetermined lines when the walls of the cover are collapsed and automatically erected when the walls of the cover are adjusted to erected position.

4. A carton comprising an article supporting bottom member, and a collapsible cover including hingedly connected top, side and end walls and dimensioned to telescopingly embrace the bottom member and having a vertical width substantially exceeding that of the bottom member, the side walls having hinging flap portions at the ends thereof foldable thereon, the cover end walls having corner flaps hingedly connected thereto and disposed on the inner sides and fixedly secured to said hinging flaps of said side walls, said corner flaps having post member portions integral therewith and hingedly connected thereto and to the end walls in spaced relation to the hinges of the corner flaps thereto, said post members being vertically scored for folding on predetermined lines when the walls of the cover are collapsed and automatically erected when the walls of the cover are adjusted to erected position.

5. A carton comprising a bottom member of rectangular section and a collapsible cover therefor comprising a top and side and end walls, the side walls having hinging flaps at the ends thereof foldable thereon, the cover end walls having end corner flaps hingedly connected thereto and disposed on the inner side and fixedly secured to said hinging flaps of said side walls, said corner flaps having collapsible corner post members hingedly connected thereto and to said end walls in spaced relation to the connections of said corner flaps thereto, said post members being vertically scored for folding along predetermined lines whereby they are automatically adjusted to erected position upon erection of the walls and to collapsed position upon the collapsing of the walls.

6. A collapsible carton cover including a top, and side walls hingedly connected to the top, one opposed pair of side walls having hinging flaps at the ends thereof foldable thereon, the other pair of side walls having corner flaps hingedly connected thereto and disposed upon and fixedly connected to the hinging flaps of said first pair of opposed side walls, said corner flaps having upper portions thereof projecting therefrom and having laterally spaced vertical folding scores defining post member sections, the outer of said sections being fixedly connected to the side walls from which the said corner flaps extend and so that the post members are automatically erected and collapsed upon the erecting and collapsing of the walls.

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