Dec. 17, 1935. H. L. MYERS 2,024,832

CONTAINER

Filed March 22, 1934

Fig. 1.

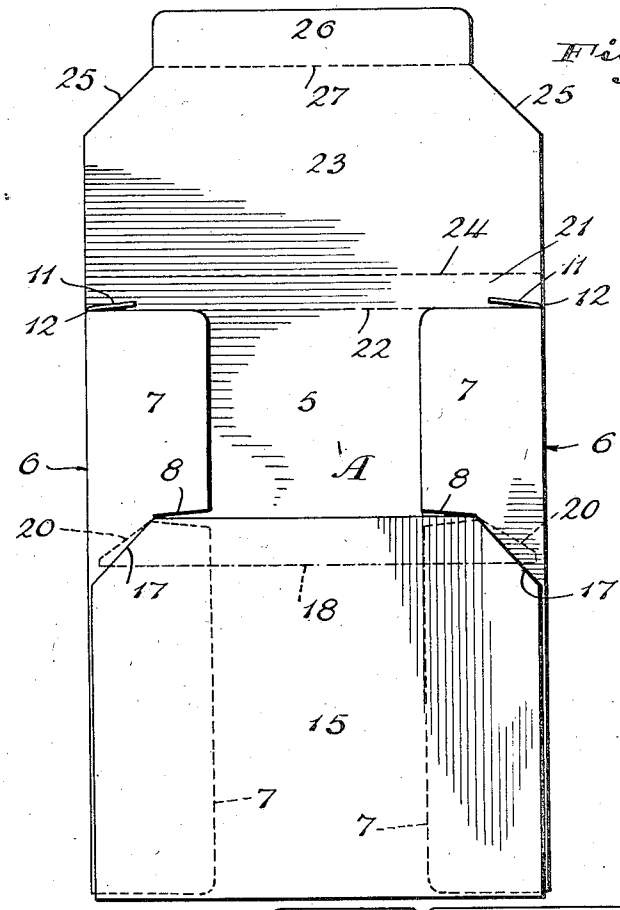


Fig. 2.

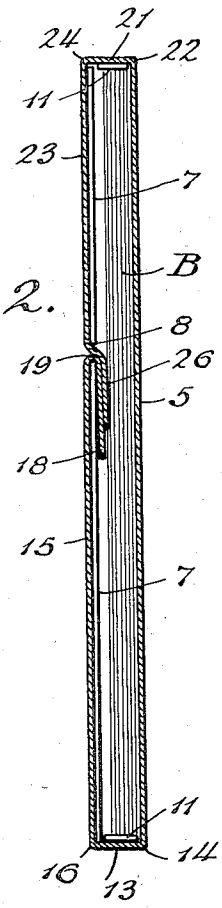
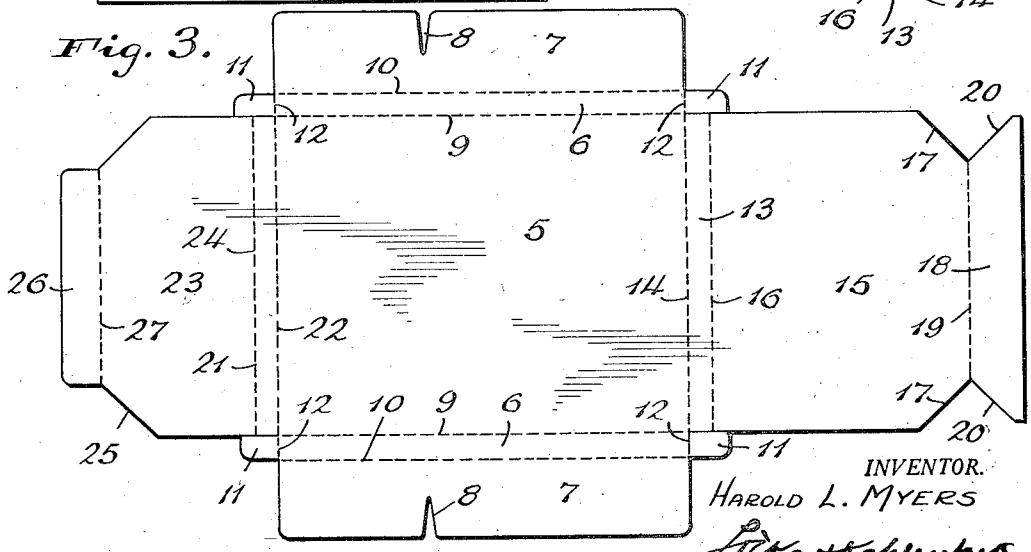


Fig. 3.



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CONTAINER

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4 Claims. (Cl. 229—16)

The invention relates to containers of the carton type and more particularly to cartons adapted for containing and merchandising paper sheets as exemplified specially by loose-leaf pages including recesses or openings whereby said pages may be loosely bound in suitable binders. In practice packages consisting of predetermined numbers of loose-leaf pages are arranged for sale in containers and, prior to the actual sale thereof, are ofttimes subjected to repeated handling which includes partial or complete withdrawal thereof from the containers for purposes of examination. As such loose-leaf pages, particularly at the recesses or openings thereof, are easily torn, this repeated handling results in considerable damage or injury thereto, whereby many pages are rendered useless and unsaleable. The same is true of equivalent sheets of paper or other easily damaged material which are packaged and displayed for sale in a corresponding manner. The object of the invention is to provide a novel form of carton which constitutes an efficient container for the loose-leaf pages or equivalent sheets and which permits repeated withdrawals from and replacements of the sheets in the cartons for examination or other purposes without material danger of tearing or otherwise damaging the loose-leaf pages or equivalent sheets or other merchandise. Other objects will appear from the description hereinafter and the features of novelty will be pointed out in the claims.

In the accompanying drawing, which shows an example of the invention without defining its limits, Fig. 1 is a face view of the novel carton; Fig. 2 is a longitudinal sectional view, and Fig. 3 is a view of the blank from which the carton is constructed.

While the novel carton is shown in a shallow tray-like form specifically adapted for merchandising loose-leaf pages and is so described, it is to be distinctly understood that the dimensions and arrangement of said carton may be changed and that said carton may be utilized with equal efficiency for containing other forms of paper sheets or other merchandise.

In its illustrated form the carton comprises a back member 5 which is dimensioned and shaped to form the back of the carton and which, in the drawing, is of rectangular form as shown in Figs. 1 and 3. Inwardly directed side members are foldably connected with the back member 5 along its opposite side edges, said side members in the illustrated example, consisting of side panels 6 hinged to the back member 5 along the side edges thereof, and front flaps 7 hinged to said side panels 6 and projecting inwardly therefrom as shown in Fig. 1; the front flaps 7 are relatively narrow and when folded into place accordingly have their opposed free edges in spaced relation to each other as illustrated in Fig. 1. At intermediate points of their free edges, the front flaps 7 are provided with notches 8 located in transverse registry with each other and preferably of tapering form as indicated in Figs. 1 and 3. The hinged connection between the side panels 6 and the back member 5, and between the front flaps 7 and the side panels 6 may be effected in any suitable manner; if, as is preferred, the carton consists of a foldable blank such as illustrated in Fig. 3, the hinged connections may simply consist of score lines 9 and 10 respectively, produced at the proper places upon said blank. In order to most efficiently complete the carton, as will be more fully set forth hereinafter, the side panels 6 are provided at their opposite ends with flaps 11 foldably connected with said panels 6 along score lines 12 or hinged thereto in any other convenient manner.

The carton further includes a pair of end members foldably connected with the back member 5 at its opposite ends, said members, in the operative closed condition of the carton, projecting toward each other in overlying relation to the side members or more specifically to the front flaps 7 thereof, and together forming the front of the carton as will appear more fully hereinafter.

One of said end members constitutes a body member and consists of an end panel 13 hinged to one end of said back member 5, for instance by being foldably connected with one end edge thereof along a score line 14 which, in the illustrated example, is located in registry with the score lines 12 of the flaps 11 at this end of the carton as shown in Fig. 3; the end member referred to further consists of a front panel 15 which is hinged to the end panel 13, for instance by being foldably connected therewith along a score line 16 as illustrated in Fig. 3. In its preferred form the front panel 15 is formed with a tapering end, for instance by having its corners cut away along oblique lines 17 and is dimensioned to terminate in registry with the notches 8 when occupying the position shown in Fig. 1; the front panel 15 accordingly partly forms the front of the carton, and at said tapering end is provided with a locking flap 18 hinged to the panel 15 for instance along a score line 19. The locking flap 18 preferably

diverges outwardly along oblique lines 20 or their equivalent and is foldable in the notches 8 beneath the front flaps 7 to detachably lock said front panel 15 in place; with this arrangement the notches 8 and locking flaps 18 constitute co-operating means on the side members and body member, or specifically on the front flaps 7 and front panel 15 respectively whereby the latter is detachably interlocked with said side members.

The other end member which constitutes a cover member, consists of a second end panel 21 hinged to the other end of said back member 5 for instance, by being foldably connected with the other end edge thereof along a score line 22 located in registry with the score lines 12 at this end of the member 5 as shown in Fig. 3. The said other end member further consists of a cover panel 23 hinged to the second end panel 21 for instance along a score line 24 and preferably having a tapering end 25 as illustrated in Figs. 1 and 3; in the closed condition of the carton the cover panel 23 is folded over the front flaps 7 in overlying relation thereto and terminates in proximity to the body member or front panel 15 thereof to complete the front of the carton. Suitable means is provided for releasably locking the cover member or the cover panel 23 thereof in place; in the illustrated example this means comprises a tongue 26 hinged to the tapering end 25 of the cover panel 23 for instance along a score line 27, said tongue 26 being adapted to project inwardly through the notches 8 to lock said cover panel 23 in its closing position.

When the blank shown in Fig. 3 is folded into shape along the respective score lines or equivalent hinging means, the side panels 6 occupy positions approximately perpendicular to the back member 5 with the front flaps 7 projecting inwardly therefrom in spaced relation to said back member 5. Similarly the one end panel 13 occupies a position perpendicular to said back member 5 with the front panel 15 extending therefrom in overlying relation to the front flaps 7 and with the locking flap 18 folded inwardly into the notches 8 beneath the front flaps 7 to lock said front panel 15 in place. The panel 15 thus partly forms the front of the carton, which in a direction beyond said panel 15 accordingly includes the open space A between the front flaps 7 as long as the cover panel 23 occupies the open position shown in Fig. 1.

This space A enables the contents of the carton to be readily inspected and at the same time facilitates the complete or partial removal of said contents from the carton without material danger of injury to the contents in question.

When the carton is completely closed the second end panel 21 occupies a position perpendicular to the back member 5 with the cover panel 23 folded over the front flaps 7 to complete the front of the carton and close the space A, and with the tongue 26 projecting inwardly through the notches 8 to releasably lock said cover panel 23 in place. In the completely folded and closed condition of the carton, the flaps 11 are folded inwardly inside of the end panels 13 and 21 respectively.

As shown in Fig. 2 the inwardly extending locking flaps 18 and tongue 26 lie upon the surface of the merchandise B in the carton and because of their inherent resiliency exert a slight pressure thereon; if the merchandise consists of loose-leaf pages or equivalent sheets, this pressure develops a smoothing action thereon tending to prevent said merchandise from becoming crumpled or otherwise injured in its withdrawal from and insertion into the carton. At the same time the pressure developed by the flaps 18 and tongue 26 serves to maintain said merchandise in the most efficient condition in the carton. The carton includes no internal projections tending to develop a resistance to the withdrawal of the merchandise from or its insertion into the carton and accordingly adapts the latter particularly for merchandise which is easily torn or otherwise damaged.

The carton is simple in construction and easy to fold into position for use and in its normal condition, as a blank, is capable of being readily stored and shipped in large quantities in a minimum of space; because of its simplicity the carton is also economical to produce.

It will be understood that the carton is generally constructed of cardboard or other material sufficiently yieldable to permit the interlocking of the front flaps 7 and the front panel 15 and the insertion of the tongue 26 into the notches 8 to be readily accomplished without injury to said material.

Various changes in the specific forms shown and described may be made within the scope of the claims without departing from the spirit of the invention.

I claim:

1. A container comprising a back member, side panels hinged to said back member along the opposite side edges thereof, front flaps hinged to said side panels and projecting inwardly therefrom in spaced relation to said back member, said front flaps being provided with notches at intermediate points of their free edges, an end panel hinged to said back member along one end edge thereof, a front panel hinged to said end panel and extending over said front flaps, said front panel having a tapering end located in registry with said notches and partly forming the front of the container, a locking flap hinged to the tapering end of said front panel and diverging outwardly therefrom, said locking flap being foldable in said notches beneath said front flaps to lock said front panel in place, a second end panel hinged to said back member along the other end edge thereof, a cover panel hinged to said second end panel and arranged to fold over said front flaps to complete the front of the container, said cover panel having a tapering end adapted to register with said notches, and a tongue hinged to the tapering end of said cover panel and adapted to project inwardly through said notches to lock said cover panel in place.

2. A container comprising a back member, inwardly directed side members hinged to said back member along opposite side edges thereof and provided with notches at intermediate points of their free edges, a body member hinged to said back member along an end edge thereof and projecting over said side members, said body member bridging the space between said side members and terminating in a reduced end at said notches to partly form the front of the container, a locking flap hinged to said body member at its reduced end and diverging outwardly therefrom, said locking flap being foldable in said notches beneath said side members to lock said body member in place, a cover member hinged to said back member along the op-

posite end edge thereof and foldable over said side members to complete the front of the container, and a tongue hinged to said cover member and adapted to project inwardly through said notches to lock said cover member in place.

3. A container comprising a back member, inwardly directed side members hinged to said back member along opposite side edges thereof and provided with notches at intermediate points of their free edges, a body member hinged to said back member along an end edge thereof and projecting over said side members, said body member bridging the space between said side members and terminating at said notches to partly form the front of the container, a locking flap hinged to said body member and foldable relatively thereto in a return direction in said notches beneath said side members to lock said body member in place, a cover member hinged to said back member along the opposite end edge thereof and foldable over said side members to complete the front of the container, and a tongue hinged to said cover member and adapted to project inwardly through said notches to lock said cover member in place.

4. A container comprising a back member, side members foldably connected with said back member along opposite edges thereof and projecting inwardly in spaced relation to said back member, said side members being provided at the inner edges with inwardly open notches, a body member foldably connected with said back member along an edge thereof and overlying said side members, said body member terminating at said notches and converging inwardly to a width corresponding approximately to the distance between the closed ends of said notches, means foldably connected with said body member at said converging end and foldable in a return direction in said notches beneath said side members to secure said body member in interlocking connection with said side members, and a cover member foldably connected with said back member along the opposite edge thereof and foldable over said side members to complete the front of the container.

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