

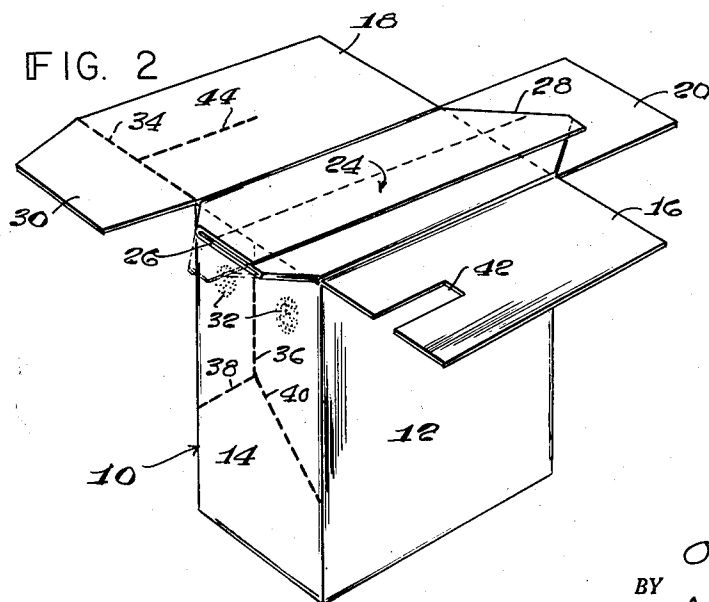
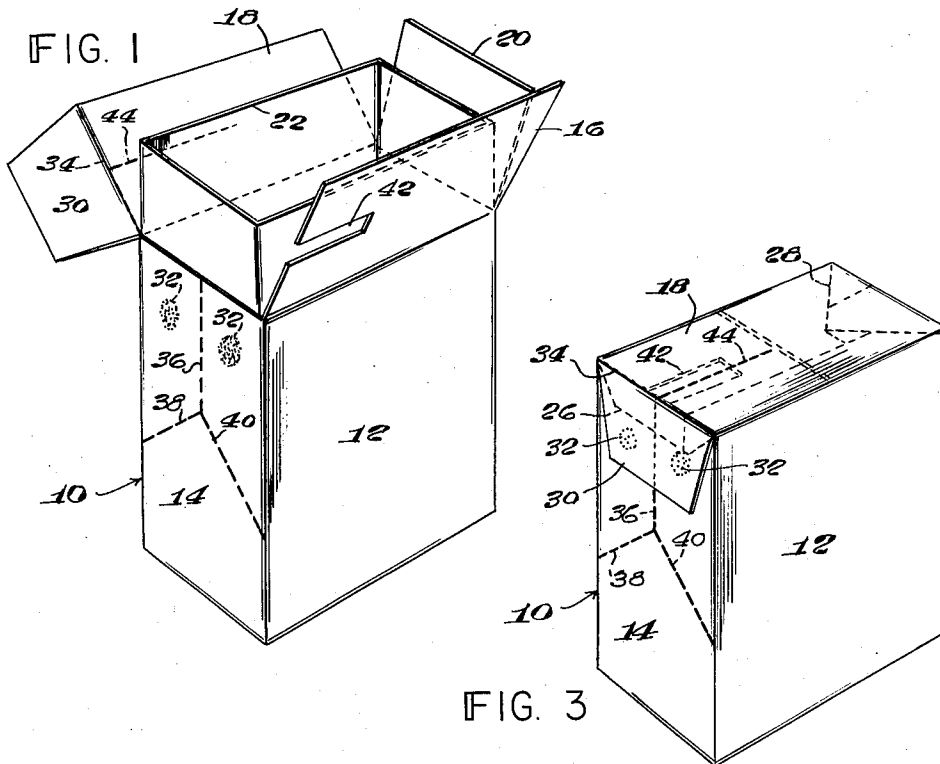
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2,982,461

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2 Sheets-Sheet 1



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2 Sheets-Sheet 2

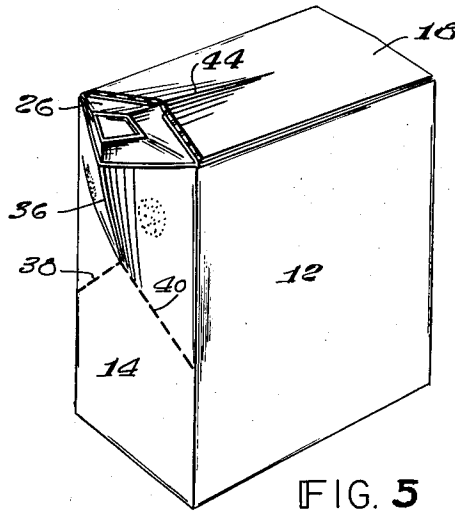
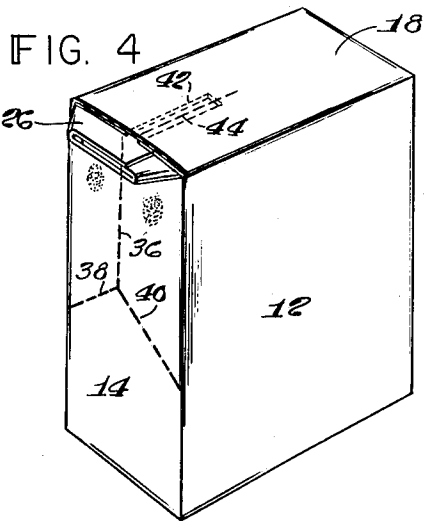


FIG. 5

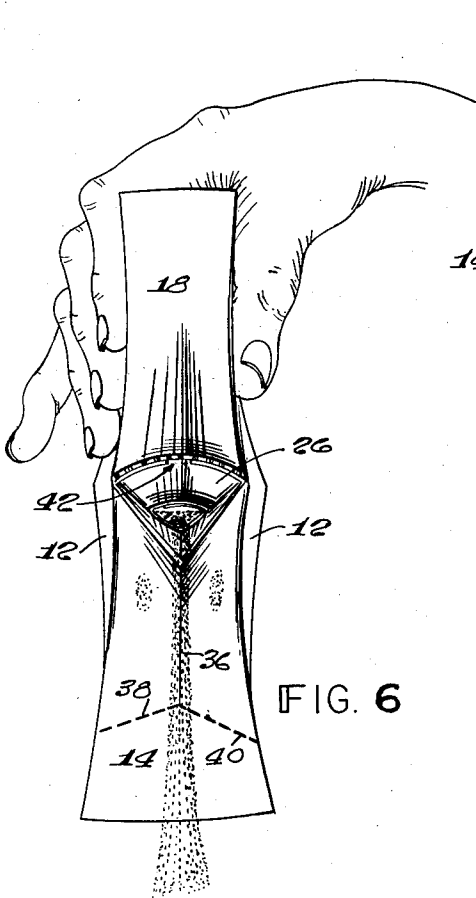


FIG. 6

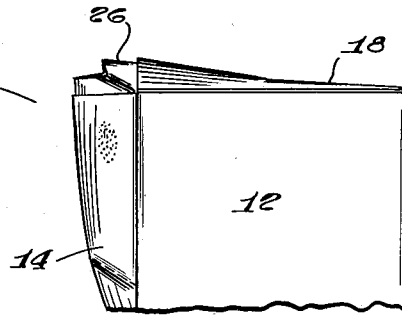


FIG. 7

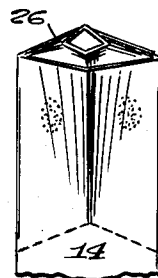


FIG. 8

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10 Claims. (Cl. 229—17)

This invention relates to a package having a pouring spout.

The invention has for an object to provide a novel and improved package comprising a carton having an inner lining containing flowable solid material, and which is provided with a novel top closure wherein a portion of the lining exposed by detaching a portion of the carton closure is formed in a manner such that by applying pressure to the sides of the carton the exposed portion of the lining forms a pouring spout.

With this general object in view and such others as may hereinafter appear, the invention consists in the package hereinafter described and particularly defined in the claims at the end of this specification.

In the drawings illustrating the preferred embodiment of the invention:

Fig. 1 is a perspective view of a lined carton for forming the present package showing the top closing flaps and the mouth of the lining extended;

Fig. 2 is a perspective view of the package showing the lining mouth folded and sealed with a laterally extended tab severed to form a pouring spout;

Fig. 3 is a perspective view of the present package in its completely closed and sealed condition;

Fig. 4 is a similar view showing the carton with one of its closing flaps detached to expose the pouring spout;

Fig. 5 is a similar view showing the pouring spout in its open condition;

Fig. 6 is a perspective view illustrating the manner of compressing the sides of the container to effect opening of the pouring spout; and

Figs. 7 and 8 are side and front elevations respectively of the package illustrating the pouring spout in its open condition.

In general the present invention contemplates a novel and improved package comprising a lined carton wherein a portion of the lining closure is adapted to form a pouring spout. In the filled and closed package the pouring spout is folded with one of the carton closing flaps in a manner such that when the flap is detached the lining pouring spout may be opened by the application of pressure to the sides of the package to permit discharge of the contents, and upon discontinuance of the side pressure the carton walls and the pouring spout will spring back to their initial position to effect reclosing of the pouring spout.

Referring now to the drawings, the illustrated package comprises a carton having a body portion 10 including side and end wall panels 12, 14 respectively provided with three top closing flaps extended from and foldably connected to the body panels including side flaps 16, 18 and end flap 20, one of the end wall panels 14 being free of a closing flap, as shown. An inner lining or lining bag within the carton is provided with an extended mouth portion 22, as shown in Fig. 1, for forming the top closure. After filling the package the mouth portion of the lining is folded to provide an elongated closure, indicated generally at 24, herein shown as being formed by folding two

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opposed side walls of the lining mouth portion inwardly into overlapping relation and adhesively securing the same, and simultaneously folding opposed end walls of the lining mouth portion outwardly, thus forming hollow laterally extended end tabs 26, 28 triangular in shape, as illustrated. In the preferred embodiment of the invention the hollow end tab 26 adjacent the flap-free panel 14 may then be severed transversely at a point intermediate the base and the apex of the triangular tab to provide an outlet between the folded portions of the hollow end tab in communication with the interior of the package and forming a pouring spout. The other triangular end tab 28 may be folded inwardly on top of the carton with the first folded flap 20, and the side flaps 16, 18 may then be folded in succession one on top of the other and adhesively secured together. The flaps 16 and 18 are of such a width that, when folded, they fully cover the top of the lining, one flap overlying the other, and both overlying the lining. The flap 20 is of such a length that, when folded, it extends about midway across the top of the lining toward the flap-free panel. By virtue of this construction, the flaps 16 and 18 provide a firm, yet flexible backing for the pouring spout, and the flap 20 serves to seal the package, yet does not interfere with the bowing of the flaps 16 and 18 as described hereinafter.

As herein shown, the last folded side flap 18 may be provided with a lateral extension 30 foldably connected thereto and which is adapted to be folded down against and adhesively secured to the flap-free panel 14, the severed tab or pouring spout portion 26 being folded down with the flap 30 as shown in Fig. 3. The flap 30 is preferably secured to the panel 14 by relatively small bonding areas of adhesive, indicated at 32, to provide a frangible anchorage readily breakable to facilitate subsequent detachment of the flap from the panel 14, and the fold line between the flap 30 and the side flap 18 may and preferably will be weakened by providing spaced perforations or slits along the fold line, as indicated at 34, to facilitate subsequent tearing of the flap 30 from the carton when opening the same.

From the description thus far it will be seen that in use the flap portion 30 may be readily detached from the panel 14 and torn off the closing flap 18 to expose the underlying pouring spout 26 which in practice may spring up to its outwardly extended position, as shown in Fig. 4, or may be lifted up to this position by the consumer. Thereupon, application of pressure to the sides of the carton will effect bowing out of the end wall panel 14 and the top closing flaps together with the adjacent lining spout portions to open the pouring spout, as shown in Figs. 5 and 6, and through which the contents of the package may be poured. Upon release of pressure against the sides of the carton, the resiliency of the carton forming material will cause it to spring back to its initial position, thus effecting reclosing of the lining pouring spout.

In order to facilitate bending or bowing out of the flap-free panel 14 upon application of side pressure the panel may be provided with a longitudinal scored or weakened line 36 intermediate the sides of the carton, the lower end of the scored line terminating about half way down the length of the carton and branching out in diagonal scored lines 38, 40, as shown. Likewise, to facilitate bowing out of the top closure formed by the closing flaps the underlying closing flap 16 may be provided with a longitudinally extended intermediate cutout 42 adjacent the pouring spout end of the flap, and the last folded top flap 18 may be provided with a scored or otherwise weakened line 44 aligned with said cutout.

From the above description it will be seen that in the present structure of package the carton is provided with a novel top closure embodying the lining closure and the carton closing flaps wherein a folded portion of the

lining exposed by detachment and removal of a carton closing flap may be manipulated by pressure to form a convenient lining pouring spout which is self-closing or reclosable upon discontinuance of the pressure. In a modified form of the invention the triangular tab 26 may be left intact in the assembled package, and in use the consumer may sever the end of the tab to form the pouring spout after detaching the flap portion 30. Also, in practice other types of elongated lining mouth top closures having laterally extended hollow end tabs may be used without departing from the scope of the present invention.

While the preferred embodiment of the invention has been herein illustrated and described it will be understood that the invention may be embodied in other forms within the scope of the following claims.

Having thus described the invention, what is claimed is:

1. As a new article of manufacture, a package comprising a carton having body panels, three of which are provided with extensions forming top closing flaps, each of the flaps on the side panels being of a width which, when folded, fully covers the top of the package in overlying relation, one panel being free of a top closing flap with the remaining closure flaps adhesively secured together, and a lining within the carton having its mouth portion folded to form an elongated closure provided with hollow laterally extended end tabs extending beyond opposed body panels, one of said tabs having its end portion severed to provide an outlet between the folded portions thereof, one of said hollow end tabs extending laterally across the edge of said flap-free panel and the other tab lying adjacent the inner face of the top-closing flap on the opposed panel, said tab being folded downwardly on said flap-free panel, one of said carton closing flaps having a detachable lateral extension folded down and adhesively secured to the outer surface of said flap-free body panel in the completed package with the severed tab interleaved between the flap-free body panel and said folded down lateral extension, whereby detachment of said folded down lateral extension and application of pressure to opposite sides of the carton will effect spreading of the folds of said severed tab to form a pouring spout opening.

2. A new article of manufacture as defined in claim 1 wherein said folded down lateral extension is secured to the flap-free body panel by relatively small bonding areas of adhesive providing a frangible anchorage readily breakable to facilitate detachment of said lateral extension.

3. A new article of manufacture as defined in claim 1 wherein said folded down lateral extension is weakened along its fold line to facilitate detachment thereof.

4. A new article of manufacture as defined in claim 1 wherein the flap-free panel is provided with a longitudinal weakened line extending downwardly from its upper edge to facilitate outward bowing of said panel and the adjacent wall of the lining upon application of pressure to sides of the carton to open the pouring spout.

5. A new article of manufacture as defined in claim 1 wherein the flap on the end panel is of a length which, when folded, extends about midway across the top of the package and at least one of the other top closing flaps is provided with a longitudinal weakened line extending from a point adjacent the upper edge of said flap-free body panel to facilitate outward bowing of the carton top closure and its adjacent lining closure upon application of pressure to the sides of the carton to open the pouring spout.

6. A new article of manufacture as defined in claim 1 wherein one of the top closing flaps comprising the last folded flap is provided with a longitudinal weakened line extending from a point adjacent the upper edge of said flap-free body panel, the underlying flap having a cutout portion therein extending from a point adjacent the upper edge of said flap-free body panel and aligned with said weakened line to permit outward bowing of the carton top

closure and its adjacent lining portion upon application of pressure to the sides of the carton to open the pouring spout.

7. As a new article of manufacture, a package comprising a carton having side and end wall panels, three of said panels being provided with extensions forming top closing flaps, each of the flaps on the side panels being of a width which, when folded, fully covers the top of the package in overlying relation, and the flap on the end panel being of a length which, when folded, extends about midway across the top of the package, said flaps being adhesively joined to sealingly close the package, one of the end wall panels being free of a top closing flap, and a lining within the carton having its mouth portion folded to form an elongated closure provided with hollow laterally extended triangular end tabs extending beyond the end wall panels, the tab opposite said flap free end panel being folded inwardly, with the folded end flap, on top of the lining, the tab adjacent said flap-free end wall panel having its end portion severed to provide an outlet between the folded portions thereof, said tab being folded downwardly on the flap-free end wall panel, the outer one of the side panel closing flaps having a detachable lateral extension extending beyond its adjacent end wall panel folded down and adhesively secured to the outer surface of said flap-free end wall panel in the assembled package with the severed tab interleaved between the panel and said folded down lateral extension whereby detachment of said folded down lateral extension and application of pressure to the sides of the carton adjacent the severed tab will effect separation and spreading apart of the folds of the severed tab to form a pouring spout opening, return of the carton to its initial condition upon discontinuance of said side pressure effecting reclosing of said pouring spout opening.

8. A new article of manufacture as defined in claim 7 wherein the lateral extension of the folded down top closure flap is secured to the panel by relatively small bonding areas of adhesive providing a frangible anchorage readily breakable to facilitate detachment of the lateral extension from the end wall panel, said flap also being perforated along its fold line to facilitate tearing of the lateral extension from its associated top closure flap.

9. As a new article of manufacture, a package comprising a carton having body panels three of which are provided with extensions forming top closing flaps, each of the flaps on the side panels being of a width which, when folded, fully covers the top of the package in overlying relation, one panel being free of a top closing flap, and a lining within the carton having its mouth portion folded to form an elongated closure provided with hollow end tabs extending beyond the flap-free panel and opposed panel, respectively, one of said hollow end tabs extending laterally across the edge of said flap-free panel and the other tab lying adjacent the inner face of the top-closing flap on the opposed panel, one of said carton closing flaps having a detachable lateral extension folded down and adhesively secured to the outer surface of said flap-free body panel in the completed package with the adjacent hollow end tab interleaved between the flap-free panel and said folded down lateral extension, said interleaved end tab being adapted to be severed after detachment of the folded down lateral extension to provide an outlet between the folds thereof which may be opened by application of pressure to the sides of the carton to form a pouring spout.

10. As a new article of manufacture, a package comprising a carton having side and end wall panels, three of said panels being provided with extensions forming top closing flaps and one of the end panels being free of a top closing flap, and a lining within the carton having its mouth portion folded to form an elongated closure provided with hollow laterally extended triangular end tabs extending beyond the end wall panels, the tab adjacent

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said flap-free end wall panel having its end portion severed to provide an outlet between the folded portions thereof, said tab being folded downwardly on the flap-free end wall panel, one of the side panel closing flaps having a detachable lateral extension extending beyond its adjacent end wall panel folded down and adhesively secured to the outer surface of said flap-free end wall panel in the assembled package with the severed tab interleaved between the panel and said folded down lateral extension, said folded down lateral extension being secured to the panel by relatively small bonding areas of adhesive providing a frangible anchorage readily breakable to facilitate detachment of the lateral extension from the end wall panel, said flap also being perforated along its fold line to facilitate tearing of the lateral extension from its associated closure flap, said flap-free end wall panel and the carton top closure being provided with longitudinal scored lines extending in a direction away from the upper edge of said flap-free wall panel to facilitate outward bowing thereof with their adjacent lining portions upon applica-

tion of pressure to the sides of the carton to open the pouring spout, whereby detachment of said folded down lateral extension and application of pressure to the sides of the carton adjacent the severed tab will effect separation and spreading apart of the folds of the severed tab to form a pouring spout opening, and return of the carton to its initial condition upon discontinuance of said side pressure effecting reclosing of said pouring spout opening.

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