June 15, 1943. T. CARR 2,321,655

DISPENSING PACKAGE

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Fig. 1.

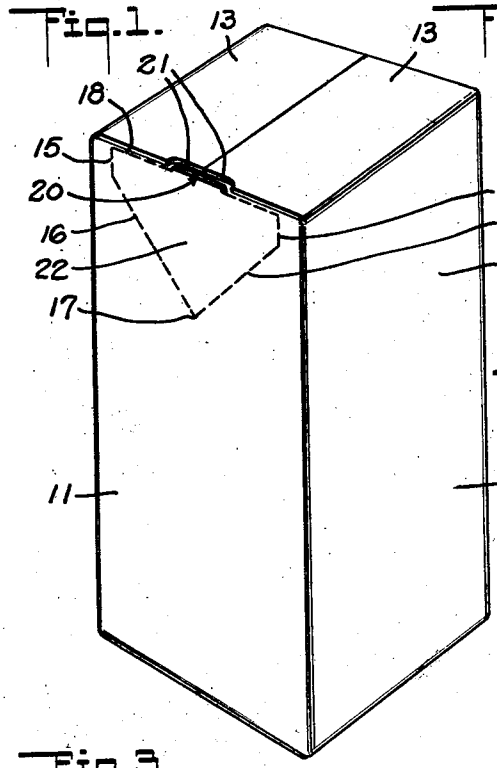


Fig. 2.

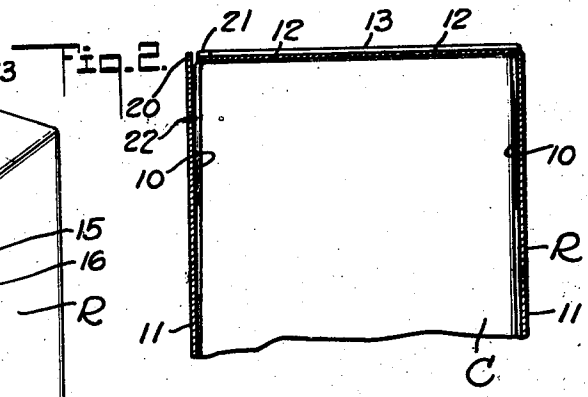


Fig. 4.

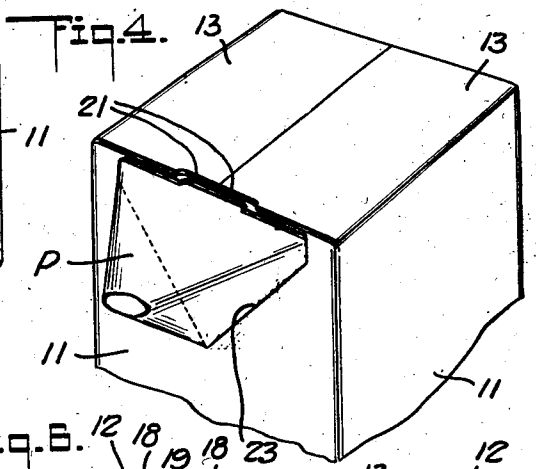


Fig. 3.

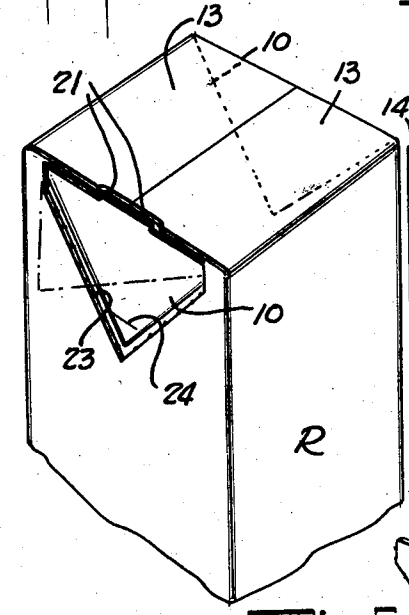


Fig. 6.

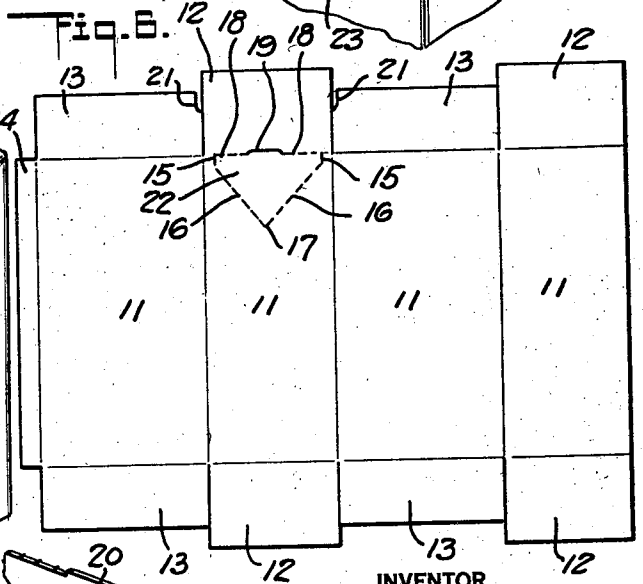
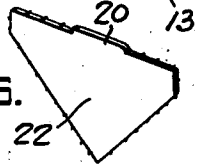


Fig. 5.



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Fig. 7.

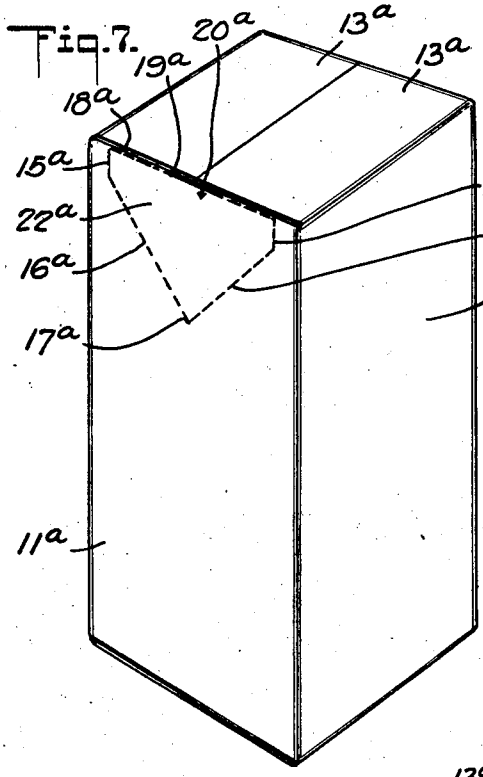


Fig. 8.

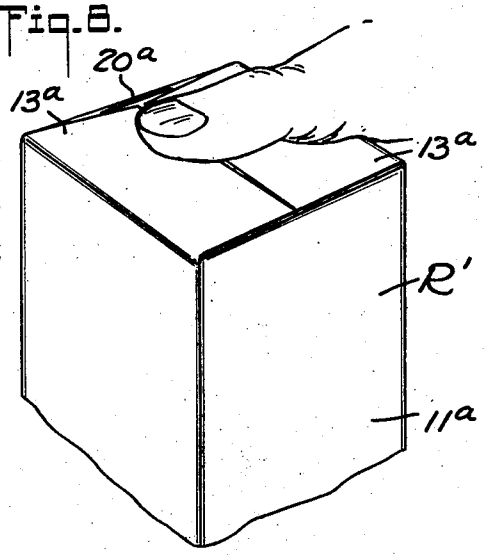


Fig. 9.

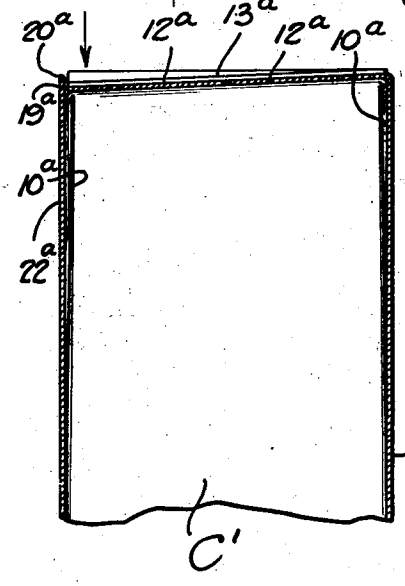
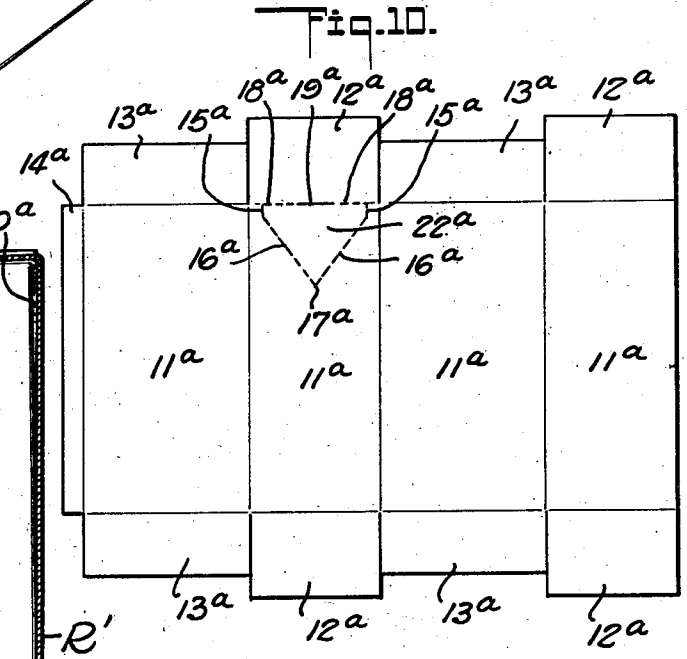


Fig. 10.



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DISPENSING PACKAGE

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Fig. 11.

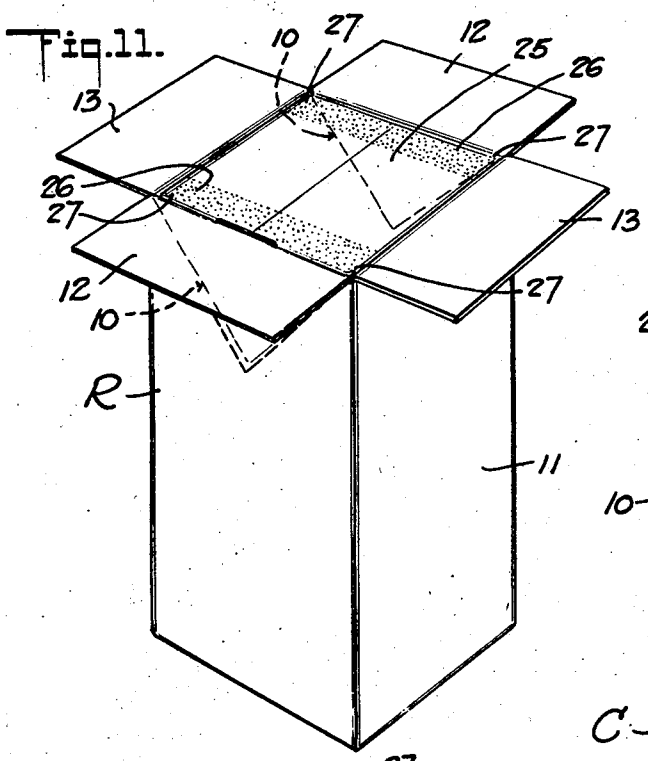


Fig. 12.

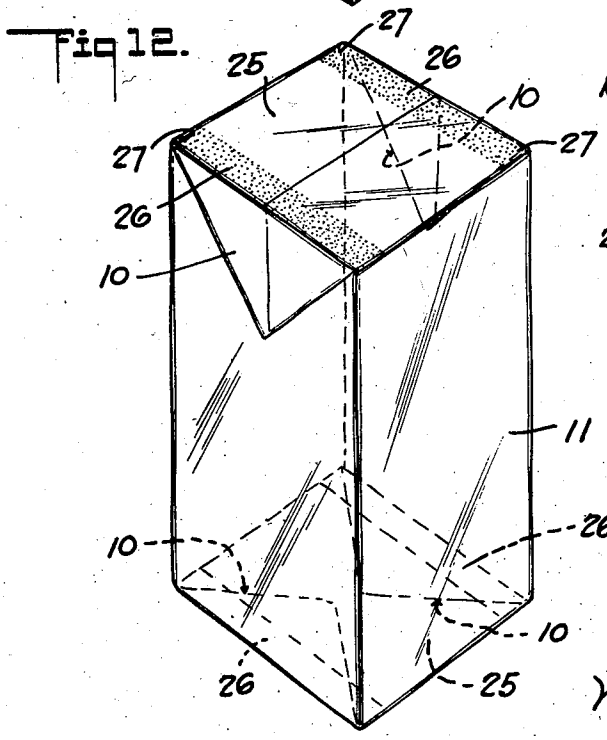
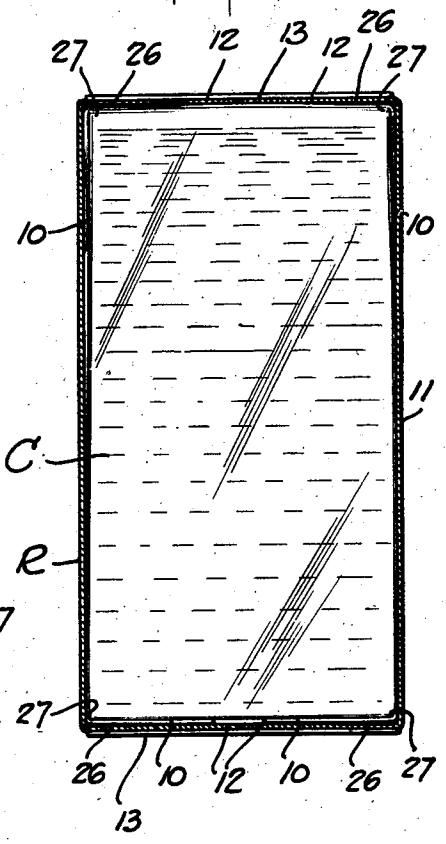


Fig. 13.



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UNITED STATES PATENT OFFICE

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DISPENSING PACKAGE

Trem Carr, Los Angeles, Calif.

Application September 25, 1939, Serial No. 296,354

5 Claims. (Cl. 229—7)

This invention relates to the art of packaging commodities, and more particularly to dispensing packages.

An object of this invention is to provide a package embodying a flexible inner container of sheet material and a structurally strong outer or carrier receptacle protecting the relatively fragile inner container and characterized by extremely simple means manually operable to expose a dispensing portion of the inner container which is adapted to project through an opening in the outer receptacle normally closed by said means, so that the dispensing portion can function as a highly efficient pouring spout.

Another object of the invention is to provide a dispensing package wherein the closure of the outer receptacle, while adequately protected against accidental disturbing, is readily openable by a simple manipulation to leave a generally triangular opening in the receptacle, through which is exposed a generally triangular flap of the inner container normally folded flat between the container and receptacle at the closure of the latter, for manipulation of the flat through the opening to a pouring position wherein the flap can also co-act with the edges of the opening in being supported thereby in spout formation for pouring the contents of the inner container therefrom.

With these and other objects in view, the invention resides in the combinations and arrangements of elements as set forth in the following specification and particularly pointed out in the appended claims.

In the accompanying drawings,

Figure 1 is a perspective view of the sealed package;

Figure 2 is a fragmentary vertical sectional view of the upper portion of the package;

Figure 3 is a fragmentary perspective view of the package with the closure thereof opened to expose the dispensing portion of the inner container;

Figure 4 is a view similar to Figure 3 and showing the dispensing portion of the inner container forming the pouring spout;

Figure 5 is a perspective view of the closure separated from the receptacle;

Figure 6 is a plan view of the blank from which the outer or carrier receptacle is formed;

Figure 7 is a perspective view of a modified form of package;

Figure 8 is a fragmentary perspective view of the modified form of package with its closure rendered accessible for opening;

Figure 9 is a fragmentary vertical sectional view also illustrating the manner in which the closure of the modified form of package is made accessible;

Figure 10 is a plan view of the blank from which the outer receptacle of the package shown in Figures 7, 8 and 9 is constructed;

Figure 11 is a perspective view of the package with the top end thereof open to expose an adhesive bearing end of the inner container by which the latter can be anchored to the outer receptacle in the use of the package for heavy liquids;

Figure 12 is a perspective view of the inner container to illustrate one arrangement of adhesive on the ends thereof;

Figure 13 is a vertical sectional view of the package with the container and receptacle anchored together at the corner portions thereof.

Referring specifically to the drawings and particularly to Figures 1 to 6, inclusive, this form of the invention comprises an inner container C and an outer or carrier receptacle R, the inner container being constructed of flexible sheet material which is impervious, such as chlorinated rubber or "Pliofilm," both of which are capable of being hermetically sealed by the application of heat and pressure to preserve their contents. The inner container is folded from a flat blank into a rectangular envelope which is filled through one open end subsequently closed by being folded upon itself to include hollow triangular flaps 10 suitably sealed along their edges.

The outer receptacle R is constructed of chip board or other cheap sheet material having the requisite structural strength to adequately protect the inner container C against injury. The receptacle is formed from the blank shown in Figure 6, the blank being scored to provide four rectangular panels 11 having rectangular flaps 12 and 13 at their ends, and one having a side flap 14 to which a suitable adhesive is applied to secure the side flap to the inner side of that one of the panels having the free side edge so as to enable the blank to be opened to receptacle formation.

At one end, one of the panels 11 is perforated along two short lines 15 adjacent and parallel to the side edges of the panel, and these perforations are continued in two converging straight lines 16 to an apex 17. This panel is further perforated from the lines 15 along the juncture of said one end of the panel and its end flap 12 as indicated at 18, to an intermediate slit 19 which is laterally offset into said end flap 12, so that when the end

flaps are folded and secured together by a suitable adhesive (as shown in Figure 1), a finger-engageable portion or piece 20 will be formed along the length of the slit 19.

The amount of lateral offset of the slit 19 from the juncture of the panel 11 into the flap 12 is such that the height of the resulting piece 20 will, in the closed position of the end flaps, not exceed the thickness of the sheet stock from which the receptacle is made. Thus the piece 20 will not interfere with the stacking of a number of the receptacles and will not be inadvertently disturbed or struck.

In order to facilitate access to the piece 20, the adjacent side edges of the two flaps 13 which overlie said one of the flaps 12 are provided with notches 21 so that such side edges of the flaps 13 will be clear of the piece 20 in the closed and sealed condition of the package shown in Figure 1.

It will be clear that the perforated lines 15, 16 and 18, and the slit 19 co-act to define a generally triangular closure 22 having the piece 20, and which closure is at that end of the receptacle R through which the filled container C is inserted into the receptacle.

It will be noted that the container C is inserted into the receptacle R with the flaps 10 of the container folded flat between the container and receptacle, and with one of these flaps directly opposite the closure 22 as shown in Figure 2. Furthermore the flaps 10 correspond in their general outline to that of the closure 22 and are slightly less in size than the latter. Thus, upon tearing off the closure along the lines 15, 16 and 18 by pulling upon the piece 20, said one of the flaps 10 will be exposed in the resulting opening 23 in the panel 11 and can readily be swung outwardly through the opening to the pouring position shown in broken lines in Figure 3 to function as a pouring spout P, (Figure 4).

By now severing the sealed tip end of the flap 10 from the remainder of the flap along the line 24, fluid contents of the container can be conveniently poured therefrom in easily controlled quantities.

The converging side edges of the opening 23 are adapted to co-act with the pouring spout and with the body of the container in limiting the extent to which the spout can be expanded by the weight of the contents of the container during the pouring operation, and thus effectively confine the spout against rupture as well as support the spout in pouring position.

It will thus be manifest that by the above described correlation of the closure 22 and the flap 10, the opening 23 resulting from the removal of the closure, co-acts with the flap 10 in insuring that the latter will be maintained in the shape of a highly efficient pouring spout irrespective of the weight of the contents of the container tending to deform the spout.

Reference will now be had to Figures 7 to 10, inclusive, which illustrate a modified form of closure 22a for the outer receptacle R'.

In this form of the invention the outer receptacle R' is also constructed of chip board or other cheap strong material from the blank shown in Figure 10, which is scored to provide the four panels 11a having end flaps 12a and 13a, and with one panel having a side flap 14a.

At one end, one of the panels 11a is perforated along two short lines 15a adjacent and parallel to the side edges of the panel, and these perforations continue in two converging straight lines 16a to an apex 17a, all in the same manner as described for the first form of the invention. This panel is further perforated from the lines 15a along the juncture or fold between the panel and its end flap 12a as indicated at 18a, to an intermediate slit 19a.

The container C' is inserted into the receptacle R' with the flaps 10a of the container folded flat between the container and receptacle, and with one of the flaps directly opposite the closure 22a as shown in Figure 9.

That portion of the closure 22a adjacent the slit 19a provides a finger piece 20a corresponding in function to the finger piece 20 and which is rendered accessible for engagement by a finger upon pressing the top of the receptacle inwardly, as indicated by the arrow in Figure 9, thus permitting the closure to be torn from the receptacle along the tear lines 15a, 16a and 18a to leave the opening through which the flap 10a can project and form the pouring spout in the manner previously described.

In the use of the package for heavy liquids such as lubricating oils, the end walls 25 of the inner container C are preferably secured to the flaps 12 of the outer receptacle R by means of a suitable adhesive. As shown in Figures 11 and 12, this adhesive can be applied along those edges of the inner container from which the flaps 10 project, in the form of strips 26 extending to the corners 27 of the container, or can be applied to the end walls 25 or to the flaps 12 to cover the entire area thereof.

The adhesive effectively anchors the inner container in the outer receptacle against movement relatively thereto at the corners 27 so that surging of the heavy liquid contents of the inner container resulting from handling of the package cannot work the corners 27 back and forth to weaken same and cause leakage of the contents.

It will be appreciated that surging of the liquid content will alternately produce suction and pressure at the corners 27, which would ultimately fracture the inner container at the junction of the fold lines, were the inner container entirely loose in the outer receptacle.

It will be manifest that this feature of the invention greatly enlarges the range of liquid products which can be marketed in the package, and enables heavy lubricating oils for automotive use to be supplied to the consumer in quart and other small sizes in a very inexpensive and structurally strong package capable of being opened to conveniently dispense the contents with the utmost ease and dispatch.

What is claimed is:

1. A liquid dispensing package comprising: an inner flexible and sealed container having a hollow and generally triangular flap at one end through which the fluid contents of the container can be poured; a carrier receptacle enclosing the container and confining said flap flatwise between the latter and a wall of the receptacle; a closure forming a part of said wall of the receptacle and tearable therefrom along a predefined line a portion of which extends along the junction of said wall with another wall, to leave a generally triangular opening in said wall through which said flap will be exposed for operation as a pouring spout having a flat top side extending along the junction of said wall with said another wall and with the apex of the spout at the bottom thereof; and a finger piece projecting from an edge of said closure sufficiently

beyond an end of said wall to be engageable by a finger in opening the closure.

2. A liquid dispensing package comprising: an inner flexible and sealed container having a hollow and generally triangular flap at one end thereof through which the fluid contents of the container can be poured; a carrier receptacle enclosing the container and confining said flap flatwise between the latter and a wall of the receptacle; a closure forming a part of said wall of the receptacle and bounded by a line of tear, a portion of which extends along the juncture of said wall of the receptacle with another wall thereof; means defining a slit extending into the second said wall of the receptacle from the line of tear to provide a portion on the closure by which the latter can be torn along the line of tear to expose said flap for use as a pouring spout.

3. A liquid dispensing package comprising: an inner sealed container for holding a liquid; an outer receptacle enclosing said container; means defining a line of tear on a wall of the receptacle to form a separable closure, a portion of which line of tear extends along the juncture of said wall with the top wall of the receptacle; means defining a slit interrupting said portion of the line of tear to provide a finger piece on the closure by which the latter can be torn from the receptacle to leave an opening therein; the finger piece having its upper edge lying flush with the top wall; and means on the inner container accessible through said opening and adapted to form a pouring spout projecting from the opening.

4. In a dispensing package, a receptacle; means defining a line of tear on a wall of the receptacle forming the boundary of a closure on said wall; and means defining a slit interrupting a portion of said line of tear and extending in a top wall of the closure adjacent the juncture thereof with the first said wall of the receptacle so as to provide a finger piece projecting from the closure beyond an end of the top wall, and coplanar relative to the latter, and with the free edge of the finger piece terminating substantially flush with the top wall so as not to interfere with stacking of one receptacle on another.

5. In a dispensing package, a receptacle comprising side panels having end flaps foldable to close the ends of the receptacle with certain of the flaps being outermost; means defining tear lines on one of the panels outlining a closure and including a tear line along the juncture between said one of the panels and an end flap thereof; and means defining a slit interrupting the last mentioned tear line and extending into said end flap to provide a projecting finger piece on said one of the panels by which the closure can be torn from the receptacle; those end flaps which are outermost at the end of the panel having the aforestated slit being notched to clear the finger piece so as to render the latter free for engagement by the fingers.

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