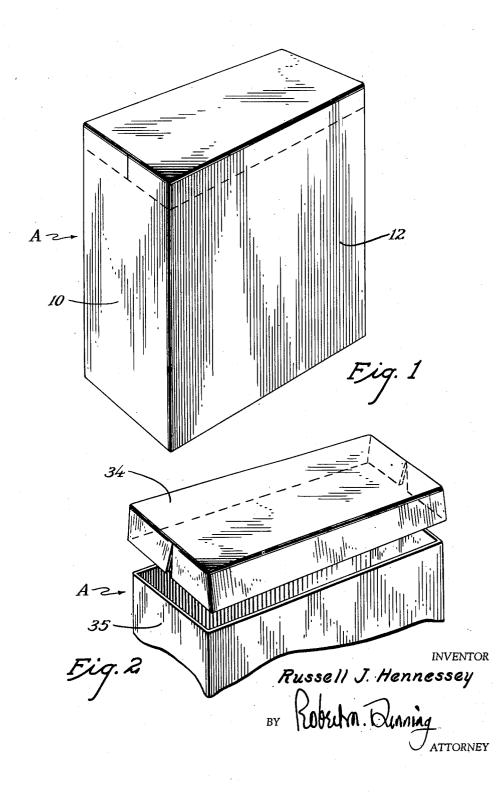
Nov. 10, 1953

Filed Jan. 2, 1951

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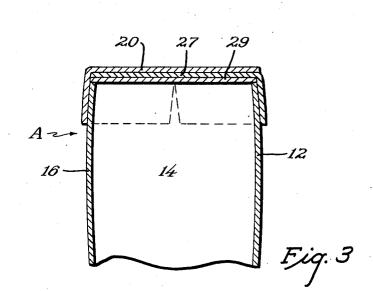


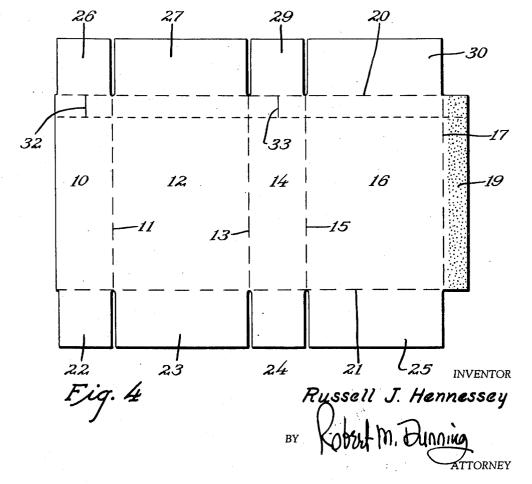
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RECLOSABLE CARTON

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This invention relates to an improvement in reclosable cartons wherein it is desired to provide a carton having a removable top which may be replaced on the carton after removal therefrom.

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Many foods contained in paper board cartons ⁵ keep better if they are kept in a closed carton. Many different reclosable cartons have been produced for this purpose. However, in cartons which contain an inner bag or lining, a carton having a removable top is usually most easily 10 handled. However, most such cartons are relatively more expensive to purchase or else relatively more difficult for the purchaser to use.

Various types of cartons have been proposed which comprise a regular glued end rectangular 15 carton having a weakened line of separation extending entirely about the body at a point spaced from the top of the carton. After the carton top has been removed it has been proposed that the user telescope the removed upper portion of the carton onto the lower portion thereof. However, as the two parts of the carton are of identical size, the lower part of the carton must be pinched together in some way to permit the upper part of the carton to telescope therewith. 25

An object of the present invention lies in the provision of a carton of the same general type as those previously constructed with a continuous weakened line of separation extending entirely about the periphery of the carton at a 30 point spaced from the upper end thereof. The top portion of the carton may be separated from the bottom portion by cutting or tearing the carton along this weakened line. However, in the present construction two opposed walls of 35 the carton are split vertically from the weakened line of separation to the top of the carton. As a result the top of the carton will spread sufficiently to permit it to be easily telescoped onto the lower portion of the carton. 40

A feature of the present invention lies in the use of an old principle to provide an advantage not previously obtained. Cartons of the type in question are provided with top closure flaps which are folded downwardly and glued in superposed relation. As the paper board is somewhat resistant to folding even along a score line, the walls of the carton have a tendency to bulge outwardly below the score lines connecting the side walls to the top and bottom flaps. By splitting 50 the carton vertically along two opposed walls, this tendency for the top flaps to resist folding proves an advantage as the tendency of the side walls of the carton to bulge causes the removed upper portion of the carton to flare outwardly 55 2

an amount sufficient to permit ready telescoping of the two parts.

A feature of the present invention resides in the fact that the two parts of the carton automatically assume a shape which permits them to be telescoped together as soon as the top part of the carton is removed. As a result it is not necessary for the user to pinch the side walls of the carton together or to force the corners of the carton inwardly to allow the telescoping of the two parts. The present structure is accordingly easier to use than previous cartons of the same general type.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification:

Figure 1 is a perspective view of the carton in sealed condition.

Figure 2 is a perspective view of the upper portion of the carton after the two parts of the carton have been separated.

Figure 3 is a sectional view through the telescoped portions of the carton.

Figure 4 is a diagrammatic view of the blank from which the carton is formed.

The carton A may be any common type of carton having rectangularly arranged side walls and 30 top closure flaps articulated thereupon. As shown in Figure 4, for the purpose of illustration, the carton A includes a side wall 10 connected along a fold line 11 to a wall panel 12. The panel 12 is connected along a fold line 13 to a side wall 35 panel 14. This side wall panel 14 is in turn connected along a fold line 15 to a wall panel 16. The wall panel 16 is hinged along the fold line 17 to a glue flap 19. In forming the carton, glue flap 19 is adhered in overlapping relation to the walls.

The carton walls are shown as connected along parallel lines of fold 20 and 21 to top and bottom flaps. Bottom flaps 22, 23, 24, and 25 are connected along the fold line 21 to the walls 10, 12, 14 and 16 respectively. Top closure flaps 26, 27, 29 and 30 are connected along the fold line 20 to the wall panels 10, 12, 14, and 16, respectively. The bottom flaps are usually folded to right angular relation with their respective side walls with two smaller flaps 22 and 24 ordinarily folding into co-planar relation with the flaps 23 and 25 folded to underlie the same and to be adhered thereto. Similarly the flaps 26 and 29 are usually folded into co-planar relation and the flaps 27 and 30 folded to overlie these smaller flaps and to be secured thereto.

A weakened line of separation **31** extends across the entire blank at a point spaced from the fold line **20**. This weakened line of separation may 5 comprise a score line, a perforated line, a cut crease or other weakened line. The weakened line **31** is so arranged that the entire rectangular upper portion of the carton may be separated from the lower portion thereof. 10

A most important part of the present invention lies in the provision of cut lines 32 and 33 which are located in the side walls 16 and 14 and which usually extend vertically from the weakened line of separation to the fold line 20. These 15 cut lines 32 and 33 may actually comprise merely weakened lines which are cut or torn during removal of the upper portion of the box. However, in actual practice it has been found that cut lines 32 and 33 may often be used as the side wall 20 panels can not spread apart to form an opening at this point until the top part of the carton is removed.

After the upper portion 34 of the carton has been removed from the lower portion 35 thereof, 25 as indicated in Figure 2 of the drawings, the tendency for the wall panels 12 and 15 to bulge outwardly causes the walls of the upper portion 34 to flare outwardly to some extent. If the cut lines or lines of separation 32 and 33 were not 30 present, the periphery of the upper portion of the carton will remain the same as the periphery of the lower portion 35. However, as the cut lines are present the tendency for the paperboard to return to flat condition causes the upper end to 35 bow slightly, the walls flaring outwardly. As a result the upper carton portion may be readily telescoped upon the lower carton portion without any difficulty. The periphery of the upper carton portion is usually sufficiently increased so that the 40 two carton parts can telescope with ease.

In accordance with the patent statutes, I have described the principles of construction and

operation of my reclosable carton, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A carton including rectangularly arranged side walls, closure flaps secured to the upper ends of said wall panels and folded into superposed relation and adhered together, a weakened line of separation extending entirely about the carton, the weakened line being substantially parallel to and spaced from the upper edges of the side walls, and a weakened line of separation, in each of two opposed walls, extending upwardly from the first named weakened line of separation to the line of fold connecting said two opposed walls to their respective closure flaps, said last named weakened lines of separation being intermediate the lines of fold connecting said two opposed wall panels to the adjacent panels, whereby when the upper portion of the carton is separated from the lower portion thereof along the first mentioned weakened line of separation, and the upper carton portion is separated along said last named weakened line, the upper carton portion will spread apart along its lower edge to permit ready telescoping onto the lower carton portion.

2. The structure described in claim 1 and in which the second weakened line of separation comprises cut lines.

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References Cited in the file of this patent UNITED STATES PATENTS

Number	Name	Date
598,581	Spencer	Feb. 8, 1898
1,977,467	Bomberger	Oct. 16, 1934
2,138,401	Gazette	Nov. 29, 1938
2,329,297	Richards	Sept. 14, 1943