Dec. 26, 1933. B. J. DAVIDSON 1,940,849

RECLOSABLE CARTON

Filed Nov. 12, 1932

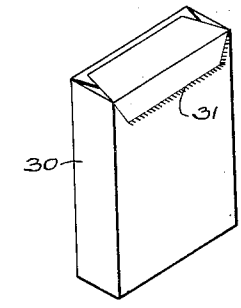


FIG. 8.

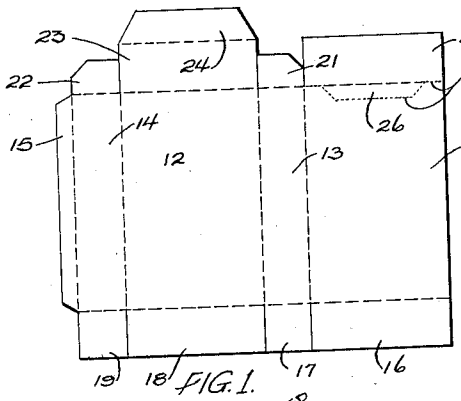


FIG. 1.

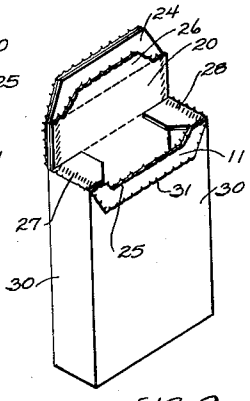


FIG. 9.

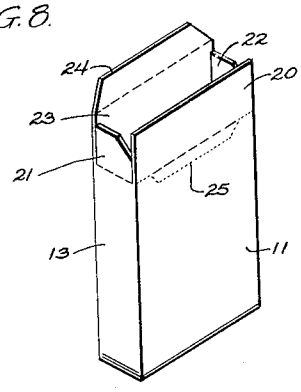


FIG. 2.

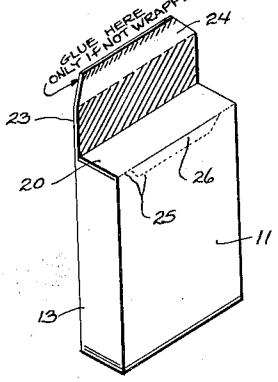


FIG. 3.

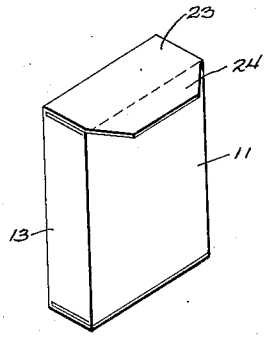


FIG. 4.

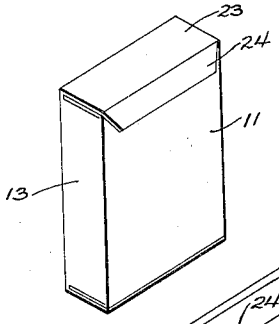


FIG. 5.

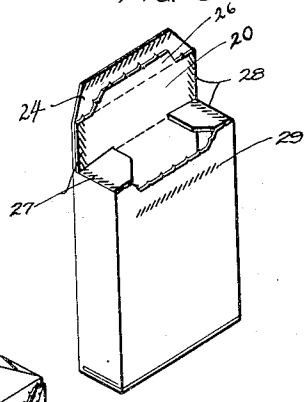


FIG. 6.

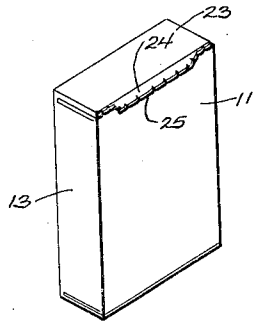


FIG. 7.

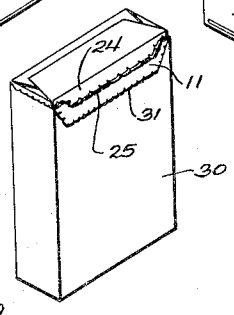


FIG. 10

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RECLOSABLE CARTON

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Application November 12, 1932
Serial No. 642,357

5 Claims. (Cl. 229—51)

This invention relates to re-closable cartons and particularly to cartons which are sealed tightly when filled, and are opened by breaking or tearing the carton along a weakened line, which, however, leaves the carton so that it can be re-closed after a part of its contents has been used. Cartons of this general type have come into quite wide use for packaging many kinds of merchandise such as cakes, crackers, cereals, cigarettes, soap powders, and many other articles that are sold in cartons containing more than one helping or serving of the commodity. In such cases it is desirable that the package be re-closed tightly until some more of its contents are wanted. The carton must also be so constructed that it can be sealed securely at the factory and prevent the sifting out of fine materials.

The present invention accomplishes the above objects and has the above advantages, and also comprises a carton which may be sealed in a tight wrapper and still be easily opened and re-closed.

In the accompanying drawing, I have illustrated two forms that my invention may take wherein:

Fig. 1 is a plan view of a blank from which the carton may be formed.

Fig. 2 shows an empty carton ready for filling.

Fig. 3 shows a filled carton with the side and front flaps folded down and sealed.

Fig. 4 shows a filled carton with the top folded down and sealed.

Fig. 5 shows the completely sealed carton.

Fig. 6 shows the carton opened.

Fig. 7 shows the carton reclosed.

Fig. 8 shows a sealed and wrapped carton embodying my invention.

Fig. 9 shows the wrapped carton opened; and

Fig. 10 shows the wrapped carton reclosed.

In Fig. 1 I have shown a blank from which my improved carton may be formed, the blank being cut and scored to provide front and back panels 11, 12, side panels 13, 14, and a sealing flap 15, the flap 15 being glued to the inner edge of the front panel 11 when the box is formed. At its lower end the blank is provided with four flaps 16, 17, 18, and 19, which are turned inwardly and glued together to form the bottom of the box, as is well known to those skilled in the art. At the upper end of the blank there are provided three flaps 20, 21, and 22, and a top or lid section 23. The flap 20 is the full size of the end of the box, but the side flaps 21, 22 have their corners cut away, as indicated, so that the tongue or flap for re-closing the box can be readily inserted. The top panel 23 is also the full size of the top end of the box and has a tongue or tucking flap 24 which lies outside of the box when the box is originally sealed, but is adapted to provide a tucking flap to be inserted within the front panel of the box to reclose it.

The front panel is provided with a transverse weakened line 25 which, at its ends, may meet or coincide for a short distance with the top edge of the box, but between its ends preferably lies below the top edge of the box so that it can be easily reached and broken when the tongue 24 has been raised to expose it.

Fig. 2 shows the box formed ready for filling with the top end left open. The blank is first folded so that the panels 11, 12, 13, 14 form four sides of the box with the flap 15 glued to the free edge of the panel 11. The bottom flaps 17 and 19 are then folded inwardly and then the flaps 16 and 18 folded in and glued together and also the flaps 17 and 19, which provides a tight seal for the bottom of the box. At the top the flaps 20, 21, and 22 and the top 23 are left standing upright so as to provide an open end for the box.

In Fig. 3 I have shown the box after it has been filled and partly sealed. In this figure the flaps 20, 21, and 22 have been turned down and sealed and glue has been applied to the under side of the top 23.

In Fig. 4 the top 23 has been pressed down and secured to the flap 20 which tightly seals the carton, but the tongue 24 has not yet been sealed down.

In Fig. 5 the tongue 24 has been bent down and lightly glued to the front of the carton and the package is completely sealed, ready to go on the market.

The flap 20 is glued to the two flaps 21 and 22, as indicated at 27, 28 in Fig. 6, but this seal is somewhat insecure although strong enough to prevent its being accidentally broken during handling or shipping, but yet tight enough to securely seal the package.

Also, the tongue 24 is sealed insecurely to the front side of the box, as indicated at 29 in Fig. 6, but this seal must be so insecure that the flap can be easily raised with the finger, its sole purpose being to prevent accidental bending up of the tongue 24 during shipment or handling of the package.

In Fig. 6 I have shown the package open. To open the package the purchaser raises the tongue 24 until he can reach the weakened line 25 either with his finger nail or a blunt instrument and

tear the carton along this tear line 25. This completely releases the tongue 24 and also releases the flap 20 from the front side of the carton, permitting the tongue 24, the flap 20, the part 26 above the tear line, and the top 23 to be turned backwardly along the edge by which the top 23 is secured to the back side 12. The box is now open and the purchaser can use as much of its contents as he desires.

Fig. 7 shows the box reclosed, the tongue 24 being inserted inside of the front panel 11.

In Figs. 8, 9, and 10 I have shown my improved carton enclosed in a tight wrapper which may be glued to the carton through its entire surface or only sealed at the ends and sides, as may be desired. Referring to Fig. 8, the wrapper 30 may be provided with a shaded or printed line 31 which will coincide with the edge of the tongue 24. In some cases this line may be omitted where the material of the wrapper is thin or the material of the carton is thick, or the wrapper is very tight on the carton so that the edge of the tongue is easily seen or found.

Fig. 9 shows the wrapped carton opened. In opening the wrapped carton the first operation is for the purchaser to break the wrapper along the edge of the tongue 24, which he does either with his finger nail or a suitable instrument. The tongue 24 is then raised and the tear line 25 broken, which permits the carton to be opened, as indicated in Fig. 9.

In Fig. 10 I have shown the wrapped carton reclosed, the tongue 24 being tucked inside of the front panel 11, just as in Fig. 7.

When the carton is wrapped, as shown in Fig. 8, the tongue need not be glued to the front panel, as shown at 29 in Fig. 6, but the wrapper will hold the tongue securely in place.

The top panel 23 preferably is made a little wider than the sides 13, 14, usually about $\frac{1}{16}$ inch or approximately twice the thickness of the box material, so that it will glue smoothly to the top flap 20 when the carton is sealed.

When the carton has been opened and reclosed by tucking the tongue 24 inside of the front panel 11, this greater width of the top 23 causes the tongue to bind and holds it securely in place.

While I have illustrated two forms that my invention may take, it is to be understood that these are only for the purpose of illustration and that the invention may be embodied in many other modifications. The terms that I have used in describing my improved carton are only for the purpose of description, and are not to be considered as limitations of the invention. Thus, the parts which I have described as front, back, top, bottom, sides, and ends might be changed or reversed if the box were made of different shape or dimensions.

I claim as my invention all changes, modifications, and adaptations thereof that may come within the scope of the following claims, or be the equivalents thereof:

1. A reclosable carton having top, bottom, front, rear and side walls, the top wall being connected at one edge to the rear wall and at its other edge having a tongue lying outside of the front wall, said front wall having a transverse tear line below its top edge and covered by said tongue, said tongue being releasably secured to said front wall below said tear line, and its lower edge being capable of being raised to give access to said tear line.

2. A reclosable carton having its top connected at one edge to the rear wall of the carton and at its other edge having a tongue lying outside of the front wall of the carton, said tongue covering a tear line in said front wall and having a loose end extending below said tear line, and means for releasably securing said loose end against said front wall.

3. A reclosable carton having its top connected at one edge to the rear wall of the carton and at its other edge having a tongue lying outside of the front wall of the carton, said tongue overlying a transverse tear line in said front wall and having a loose end extending below said tear line, and a wrapper for said carton, said wrapper holding said loose end against said front wall and being tearable along the edge of said tongue to release said free end, whereby said free end may be raised to expose said tear line.

4. A reclosable carton having a front wall with a transverse weakened line near its top, the top panel of the carton being connected along one edge to the rear wall of the carton and at its other edge having an outside tongue secured to said front wall and extending below said weakened line.

5. A reclosable carton having a front wall with a transverse tear line near its top, a flap secured to said front wall foldable over the top of the carton and separable from said front wall along said tear line, a top panel hingedly connected to the rear wall of the carton and fixedly secured to said flap, said top panel having a tongue folded on the outside of said front panel and covering said tear line, and means for releasably securing said tongue against said front panel.

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