

Feb. 8, 1938.

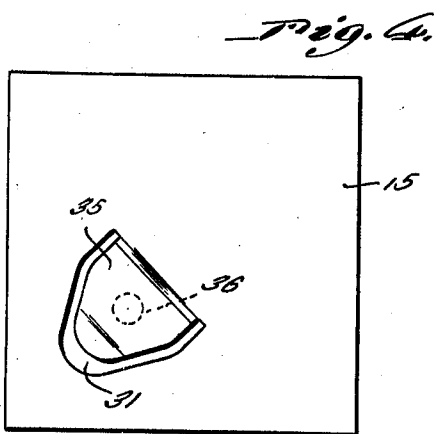
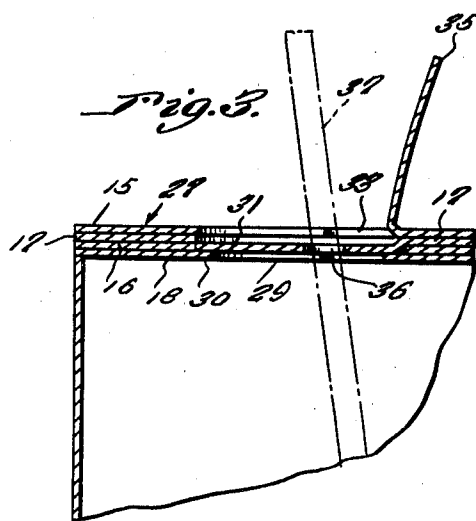
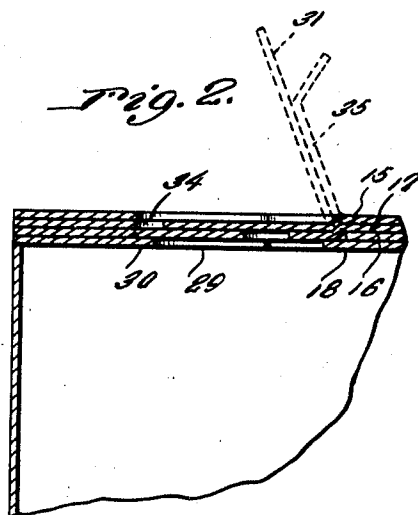
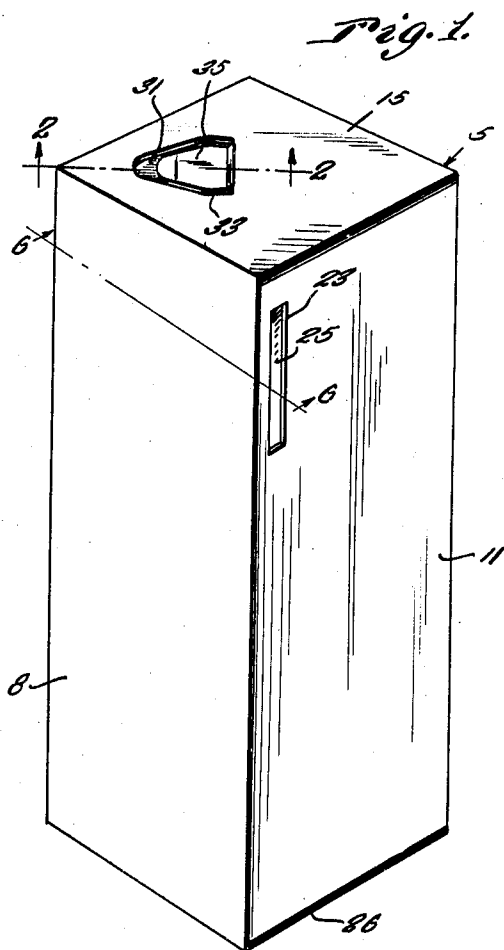
I. KOTCHER ET AL

2,107,613

CARTON

Filed Dec. 9, 1936

3 Sheets-Sheet 1



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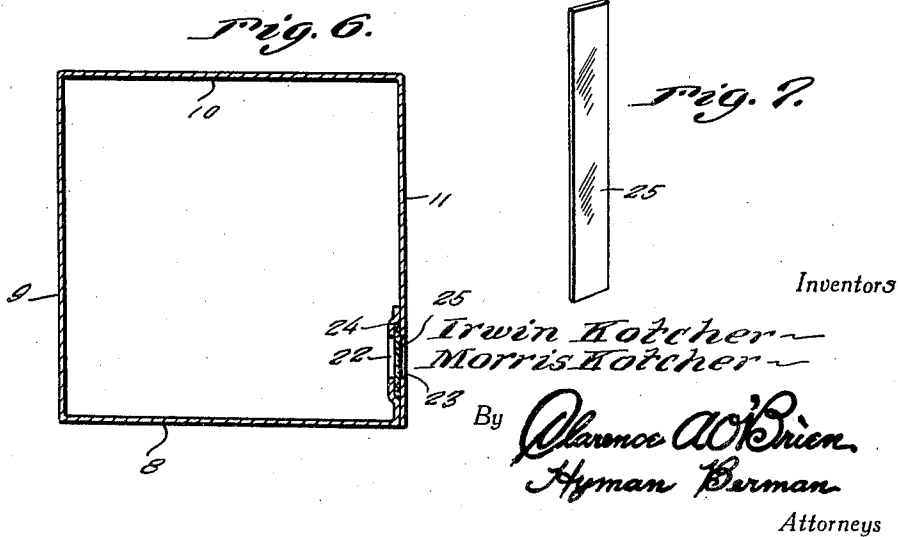
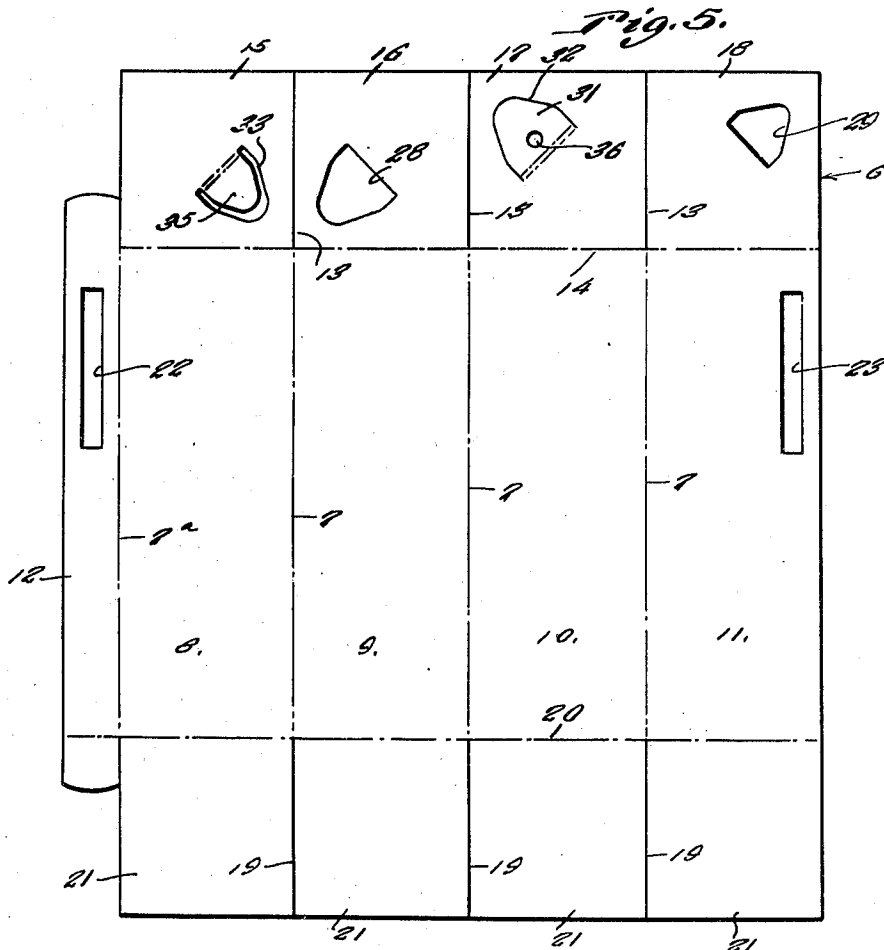
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CARTON

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Fig. 8.

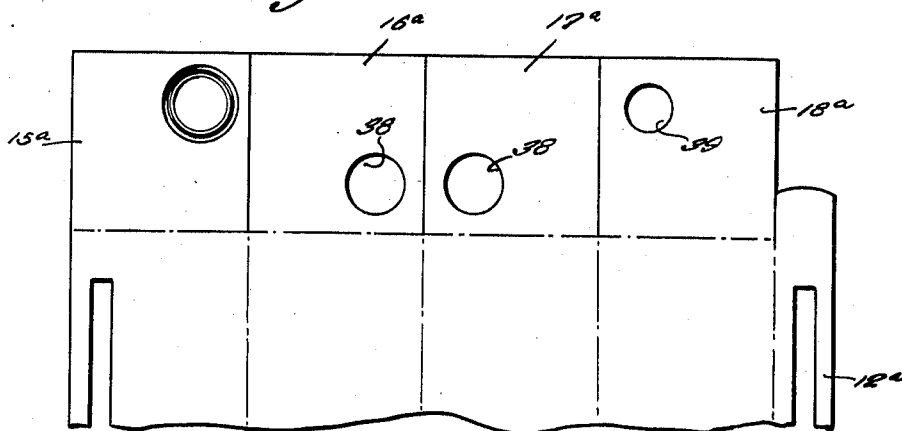


Fig. 9.

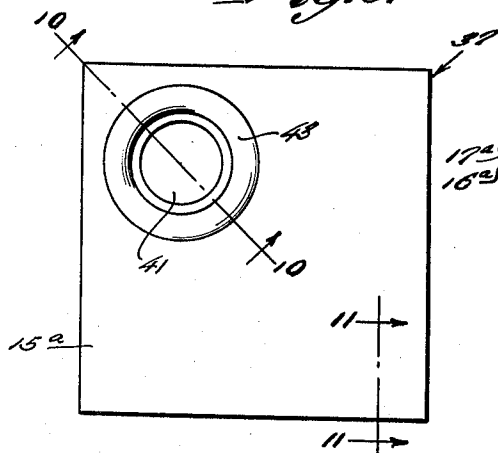


Fig. 10.

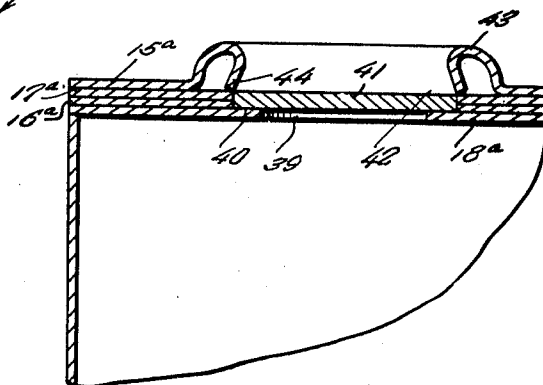
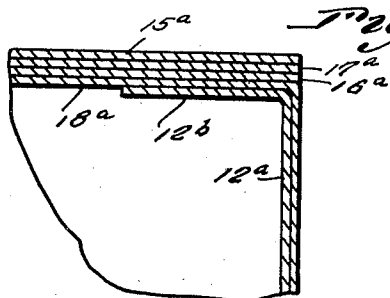


Fig. 11.



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CARTON

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Application December 9, 1936, Serial No. 115,015

1 Claim. (Cl. 229—17)

This invention relates to cartons, and more particularly to cartons formed of paper or analogous material; and an object of the invention is to provide a carton particularly designed for use in the vending of milk, cream or the like.

Briefly the invention consists in the provision of a carton formed from a single blank of paper, suitably waxed or otherwise treated if desired to render it impervious to liquid, and cut, shaped, dimensioned and folded to provide a substantially elongated rectangular carton or receptacle having improved closure means associated therewith.

The invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawings wherein:—

Figure 1 is a perspective view of a carton embodying the features of the present invention.

Figures 2 and 6 are detail sectional views taken substantially on the lines 2—2 and 6—6 respectively of Figure 1.

Figure 3 is an enlarged detail sectional view similar to Figure 2 but showing the plies of the closure flap separated so as to accommodate a straw.

Figure 4 is a top plan view of the carton.

Figure 5 is a plan view of the blank from which the carton is formed.

Figure 7 is a perspective view of a sheet of transparent material hereinafter more fully referred to.

Figure 8 is a fragmentary plan view of a blank from which a slightly modified form of carton is formed.

Figure 9 is a top plan view of the second form of carton and

Figures 10 and 11 are sectional views taken substantially on the lines 10—10 and 11—11 respectively of Figure 9.

Referring to the drawings by reference numerals it will be seen, that in each form of the invention a suitable blank is provided and this blank is cut, shaped and dimensioned so that when folded on predetermined fold lines a substantially rectangular carton is provided.

Referring more particularly to the form of the invention shown in Figures 1 to 7, inclusive, it will be seen that the carton illustrated in these figures and indicated generally by the reference numeral 5 is composed of a substantially rectangular blank 6 folded on parallel fold lines 7 to provide walls 8, 9, 10, and 11 respectively. Further at one edge thereof the blank 6 is provided with an elongated relatively narrow lateral flange or extension 12, which in the present in-

stance is integral with the wall 8 and extends at its relatively opposite ends beyond the corresponding ends of the wall 8.

Further the blank 6 is slit on lines 13 which form extensions of the fold line 7, and is also folded on fold lines 14 to provide for the walls 8, 9, 10, and 11, upper end flaps or extensions 15, 16, 17, and 18 respectively.

Also at the lower edge thereof the blank 6 is slit on lines 19 which slits 19 are in line with the fold lines 7. Also adjacent the lower portion thereof the blank 6 is foldable on lines 20 to form for the walls 8, 9, 10, and 11, bottom flaps 21.

In actual practice the blank 6 is first folded on the fold lines 7 and 7a with the extension 12, as shown in Figure 6 disposed against the inner face of the wall 7 to align a window slot 22 provided in the flap or extension 12 with a window slot 23 provided in the wall 11. A portion of the flap or extension 12 around the slot 22 is pressed outwardly as at 24 so as to accommodate between the slotted portion of the extension 12 and the wall 11 a narrow elongated strip 25 of "Cellophane" or other transparent material whereby to provide a sight window for the completed carton.

Also to form the bottom for the carton the flaps 21 are folded in super-imposed relation and adhesively or otherwise united together to present a reinforced, multi-ply bottom wall 26 for the carton.

Also in completing the carton the flaps 15, 16, 17, and 18 are folded over one another in super-imposed relation and adhesively united or otherwise secured together to provide a reinforced multi-ply top 27 for the carton.

Further in accordance with the present invention the innermost flap 18 is provided with an opening 29 properly positioned, and which may be of suitable edge contour, preferably being of the edge contour shown. The flap 16 which is disposed immediately in super-imposed contact on the flap 18 is also provided with an opening 28 of an edge contour corresponding to the opening 29 but materially larger than the opening 29 so that the portion of the flap 18 immediately defining the edge of the opening 29 may serve, as clearly shown in Figures 2 and 3 as a ledge 30.

Also the flap 17 which is disposed in superimposed relation to the flap 16 has struck out therefrom a closure flap 31 that is of an edge contour corresponding to the edge contours of openings 28 and 29. By striking out the closure flap 31 from the top wall flap 17 there is provided in the flap 17 an opening 32 that is substantially of the

same size as the opening 28 as will be clear from a study of Figures 2 and 3.

Also in accordance with the present invention the top wall flap 15 which is super-imposed immediately upon the flap 17 has a portion thereof removed so as to provide an opening 33 that is slightly smaller than the openings 28 and 32 so that the edge of the flap 15 defining the opening 33 projects inwardly from the edges of the flaps 16 and 17 as shown in Figure 2 so as to form with the ledge 30 an internal groove 34 that receives the free edges of the closure flap 31 in a manner to provide a positive retaining means for retaining the closure flap 31 against being casually opened.

Also by so forming the opening 33 in the flap 15 there is formed within the confines of the opening 33 a flap or tongue 35 which is adhesively or otherwise united with the flap 31 so as to provide with the flap 31 a two-ply closure flap for the pouring opening formed by the opening 28, 29, 32, and 33, in the top wall flaps 16, 18, 17, and 15.

Further, and if desired, the flap 32 may be provided with an aperture 36 to accommodate a straw when the flap 35 is peeled back off of the flap 31 and as clearly shown in Figure 3.

It will be of course understood that the extension 12 is adhesively united with the inner face of the wall fold 11 for securing the carton in a rigid set-up condition.

It will thus be seen that when the blank is folded and the parts referred to adhesively united together a carton such as shown in Figure 1 will result. For this carton there will be provided, as before explained, in the top 27 of the carton a pouring opening for which a closure flap formed by the flaps 31 and 35 is provided.

When the closure flap is in completely closed position flap element 31 will rest on the ledge 30 within the groove 34, the edge of the opening 33 in the uppermost fold or flap 15 thus serving as a means for retaining the closure flap in closed position and requiring a positive pull to be exerted on the closure in order to effect a swinging of the closure to the open position shown in broken line in Figure 2. Thus it will be seen that the closure flap will not likely swing to open position under weight of the contents of the carton in the event the carton is placed in an inverted or upsidedown position.

It will be further noted, and as shown in Figure 3 that when it is desired to make use of a straw 37 or the like for withdrawing some of the contents from the carton the flap 35 is peeled back off of the flap 31 to expose the opening 36 therein and through this opening the straw 37 is passed into the carton as shown in Figure 3.

In the form of the invention shown in Figures 8 to 11 inclusive the carton is formed in substantially the same manner as the preferred embodiment of the carton indicated by the numeral 5 in Figures 1 to 8 inclusive. However, in this second form of the invention, the carton, being, Figure 8 to 11 inclusive, indicated generally by the reference numeral 37 has the top wall flaps

16a, 17a provided with openings 38 that are circular and are of the same size to align with one another when the flaps are in the super-imposed position shown in Figure 10. Also the innermost top wall flap 18a is provided with a circular opening 39 that is slightly smaller than the openings 38 so that the flap 18a about the opening 39 forms a ledge 40 upon which is adapted to seat a circular or disc-like stopper 41 as shown in Figure 10.

Also, the flap 15a which is the outer or topmost top wall flap is provided with a suitably positioned substantially circular opening 42, and at the marginal edge portion of this opening the flap 15a is pressed upwardly to provide a hollow circular bead 43 the inner side of which forms a spring lip 44 that is adapted to spring into position over the top of the closure disc 41 to yieldably retain the disc 41 seated on the ledge 40 against casual displacement and as clearly shown in Figure 10.

It will thus be seen that in this form of the invention the closure disc 41 may be employed and as the same is being inserted into closed position to seat on the ledge 40 the inner wall 44 of the bead 43 will "give" inwardly to permit the disc 41 to be properly seated. After the disc 41 has been properly seated said wall 44 of the bead 43, serving as a spring lip, will spring outwardly to engage the marginal edge of the disc 41 at the top side of the disc for releasably securing the disc in seated and closed position.

It will be noted that in both forms of the invention the extension 12 or 12a as the case may be has the upper portion thereof extended beyond the fold line for the top wall flaps so that the upper end of, for example the extension 12a will fold inwardly as at 12b and as shown in Figure 11 to exert a yielding pressure against the innermost one of the top wall flaps to prevent a collapsing of the top wall.

It is thought that a clear understanding, construction, utility and advantages of a carton embodying the features of the present invention will be had without a more detailed description.

Having thus described the invention, what is claimed is:—

A carton of the class described constructed of a folded blank and having walls provided at their upper ends with flaps arranged in super-imposed relation and positively united together to provide a multi-ply top wall for the carton, all of said flaps being provided with apertures coinciding to define a single pouring opening for the carton, and the aperture in the lowermost one of said flaps being of a size slightly less than the apertures in the other of said super-imposed flaps, and the uppermost of said super-imposed flaps having at the edge thereof defining the aperture therein a raised flexible bead the inner side of which presents a spring lip adapted to spring into engagement with a closure disc seating on the innermost one of said flaps for releasably retaining the closure disc within the pouring opening.

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