July 7, 1936. W. A. RINGLER 2,047,033

DUPLEX CONTAINER

Filed Nov. 15, 1932

Fig. 1.

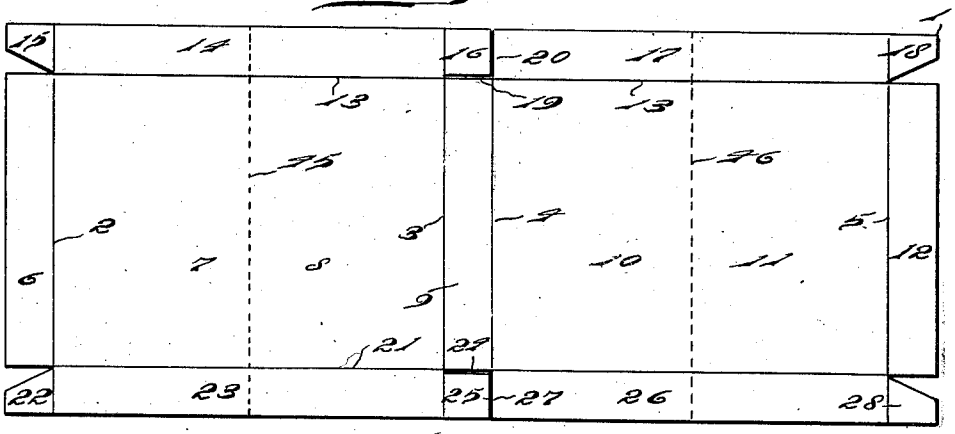


Fig. 2.

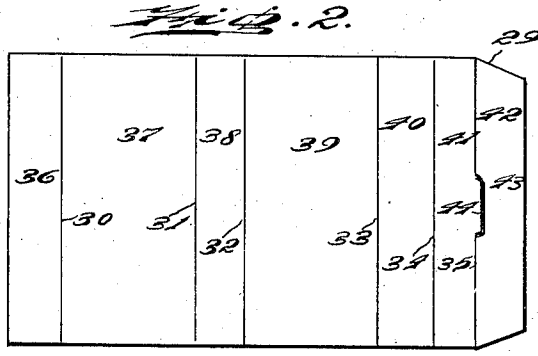


Fig. 3.

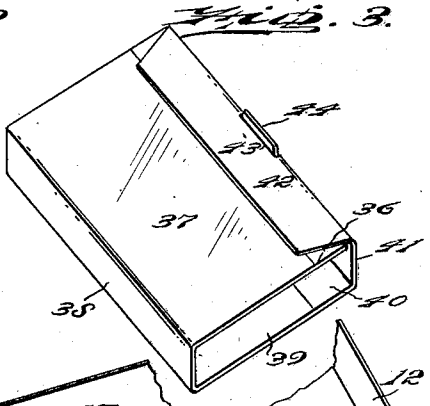


Fig. 4.

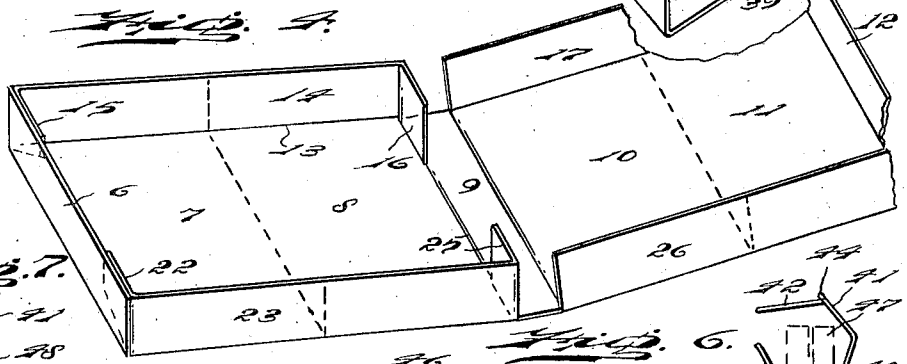
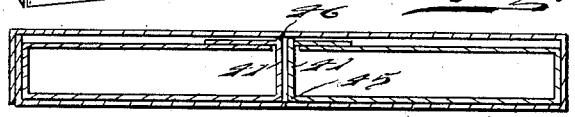


Fig. 7.



Fig. 6.



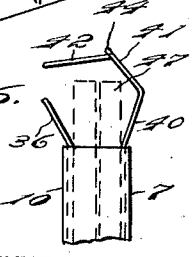


Fig. 8.

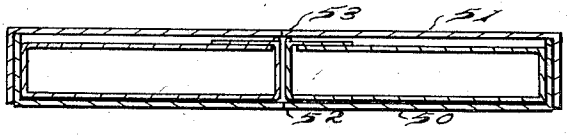


Fig. 5.

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DUPLEX CONTAINER

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Application November 15, 1932, Serial No. 642,783

3 Claims. (Cl. 229—15)

The object of this invention is to devise a novel construction and arrangement of a duplex container wherein two separate and independent containers are assembled within an outer container which is provided with a weakened line the inserts or inner containers being disposed within the box with juxtaposed walls in proximity to the weakened line whereby the container can be broken in two along said weakened line to form two separate and independent containers each of which consists of one-half of the outer container and an article carrying container slidably mounted within it.

A further object of the invention is to devise an outer blank whereby an outer container or box may be formed from a single blank of material and a novel construction of a blank for forming a novel construction and arrangement of a box-like member which serves as an article carrier in which the articles can be shipped.

With the above and other objects in view, as will hereinafter more clearly appear my invention comprehends novel constructions and arrangements of blanks and novel constructions and arrangements of blanks formed therefrom whereby two inserts of box formation can be placed within an outer container and the device broken in two along a breaking edge caused by juxtaposed walls of the inserts to provide two independent composite boxes each of which consists of an outer member into which its insert is slidable.

It further comprehends a novel duplex container which is adapted to be broken in two to provide two separate and independent containers each having an article carrier with its respective closure and the article carrier is formed in such a manner that as the articles are removed therefrom the remaining articles will be retained in a substantially fixed condition. This is especially advantageous when articles, such as, for example, cigarettes, are to be packed in the container.

It further comprehends a novel container comprising an outer box formation consisting of two members in telescopic relationship and inserts in the outer container having juxtaposed walls forming a breaking line on which the outer container and inserts can be divided to form two separate and independent article containers.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description and the appended claims.

For the purpose of illustrating the invention, I have shown in the accompanying drawing typical embodiments of it, which, in practice, will give satisfactory and reliable results. It is, however, to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized, and my invention is not limited to the exact arrangement and organization of these instrumentalities as herein set forth.

Figure 1 is a plan view of a blank from which an outer container embodying my invention may be formed.

Figure 2 is a plan view of a blank from which an article carrier embodying my invention may be formed.

Figure 3 is a perspective view of the article carrier formed from the blank seen in Figure 2.

Figure 4 is a perspective view of the outer container formed from the blank seen in Figure 1.

Figure 5 is a sectional view through the completed container before it is broken in two.

Figure 6 is a side elevation partly in section showing more clearly the manner in which articles, such as, for example, cigarettes, are accessible for removal when the container has been broken in two and one of the independent containers has been opened and partially withdrawn from its outer container.

Figure 7 is a sectional elevation of an article carrier and its outer container, showing more particularly the manner in which an article, such as, for example, a cigarette, is retained in substantially fixed and stationary position in its carrier.

Figure 8 is a sectional view of another embodiment of my invention wherein the outer container is formed from two telescoping boxes which are separate from each other instead of being connected as in the case of the construction shown in Figure 4.

Similar numerals of reference indicate corresponding parts.

Referring to the drawing:

1 designates a blank from which an outer container embodying my invention is formed. The blank is provided with the weakened lines 2, 3, 4, and 5 which contribute to form the end fold 6, body folds 7 and 8, end fold 9, body folds 10 and 11, and the end fold 12. The blank is also provided with the weakened line 13 which contributes to form a side fold 14 with end tabs 15 and 16, and a side fold 17 with an end tab 18. The line 13 merges into the slit 19 to separate the end tabs 16 from the end fold 9 and the slit 20 separates the end tab 16 from the side fold 17. In a similar manner the opposite side

of the blank is provided with a weakened line 21 extending longitudinally across it and contributing to form with the weakened line 2, an end tab 22 and also forming a side fold 23. This weakened line 21 merges into a slit 24 which separates the tab 25 from the end fold 9, it being understood that the weakened line 3 extends across the folds 14 and 23. The tab 25 is separated from a side fold 26 by a slit 27. The weakened line 5 contributes to form the end tab 28. The end tabs 15, 18, 22 and 28 are preferably, but not necessarily, cut out as shown in Figure 1. The inserts are formed from a blank 29 of sheet material, as shown in Figure 2. This blank is provided with the weakened lines 30, 31, 32, 33, 34 and 35, extending across it which contribute to form a hinged fold 36, a body fold 37, an end fold 38, a body fold 39, a hinged fold 40, a cover fold 41, and a locking flap 42. The locking flap 42 is provided with a slit 43 which contributes to form a tab 44.

The outer container is formed by proper folding of the blank seen in Figure 1, it being seen that the side folds 14 and 23 are bent upwardly as well as the end fold 6, and the tabs 15 and 22 are bent inwardly as shown, and closed or otherwise secured to the end fold 6. In a similar manner the side folds 17 and 26 are bent upwardly and the tabs 18 and 28 are secured to the inner face of the fold 12. It will thus be seen that an outer container is formed from two telescoping box-shaped constructions which are hinged together.

The inserts are formed by folding the blank 29 seen in Figure 2, into the formation seen in Figure 3, so that a box-like construction is formed with its independent closure but with opposite sides open.

The two inserts may be secured prior to insertion in the outer container or subsequently thereto and are placed within the outer container as shown in Figure 5 with juxtaposed walls in proximity to each other. The side fold 17 of the cover portion of the box is secured by adhesive or other desired means to the side fold 14, and, in a similar manner, the side fold 26 of the cover portion of the box is secured to the side fold 23 of the body portion of the box.

It will be seen that the blank 1 is provided with a scored or perforated line 45 extending laterally across it and across the side folds 14 and 23, thus dividing the body portion of the outer container into the folds 7 and 8. In a similar manner, a scored or perforated line 46 extends across the blank to form the body folds 10 and 11 and also extends across the side folds 17 and 26. It will thus be understood that when the articles are packed in their inserts or inner containers and placed in the outer container with the cover secured to the body portion, the parts will appear as seen in Figure 6 and the weakened line 46 will form a continuation of the weakened line 45 so that there is a perforated or scored line extending completely around the outer container on which it can be broken, the juxtaposed walls formed by the end closures 41 of the inserts forming a breaking line in proximity to the scored or perforated lines 45 and 46. The outer container, if desired, may be wrapped in the usual manner with a transparent, regenerated cellulose sheeting, or other type of wrapper which will tend to prevent the entrance of moisture into the inserts which form the article carriers.

Assuming now that the user has purchased a package, as shown in Figure 5, and desires to open it, he grasps a side of the package with one hand and the opposite side of the package with the other hand and bends opposite sides downwardly so that the box will break on the line 46 and he then bends opposite portions of the package in the opposite direction so that the outer container will break on the line 45. This provides two separate and independent containers each of which consists of an outer container with an inner container slidable therein.

When it is desired to remove an article from one of the separate containers the user places his finger nail under the tab 44 and draws the article carrier outwardly, folding outwardly the folds 36 and 40, see Figure 6, so that an article 47, such as, for example, a cigarette, can be readily removed. Special attention is directed to the fact that after a number of articles have been removed from one of the independent containers the articles will still be retained in substantially fixed position therein when the article carrier is moved into its outer container, since, the side walls of the article carrier after being opened and the flaps opened outwardly deflect inwardly as shown at 48 and 49 in Figure 7. This places sufficient tension on the articles to retain them in place. For example, if cigarettes are employed it prevents the shaking or rattling of the cigarettes and thereby the tobacco from falling out the ends of the cigarette wrapper.

In the form shown in Figures 1, 4, 5, 6 and 7, the outer container is formed from a single sheet of material.

In Figure 8, I have shown another embodiment of my invention wherein a conventional telescoping box is employed having a flanged bottom 50 and a flanged top 51. The lower box section is provided with the weakened line 52 corresponding to the weakened line 45 which extends around the bottom section and its side flanges and the top section is provided with a scored or perforated line 53 corresponding to the line 46 which extends around the top of the box and the side flanges of the top section. It will thus be seen that it is immaterial whether the outer container is formed from a single blank or from two blanks since the package is broken apart in a similar manner to that already described with reference to the other figures of the drawing, so that two separate and independent containers are provided.

It will be noted that in this form of my invention when the package is broken in two each separate and independent package will have a triple wall at the bottom and double walls at two opposite sides, the other two opposite side walls having the double thickness of the outer container.

In the form seen in Figure 5 the separate container formed by the left-hand portion of the package will have a triple wall at the bottom, whereas the one at the right will have a double wall.

In order to illustrate the simplest form of package, the blank shown in Figure 2 is not provided with any folds which would form end folds for the insert but it will, of course, be apparent that if desired the inserts may be provided with folds which would close in the opposite ends in addition to the side folds 37 and 39.

My present type of container can be very economically manufactured as it may be formed from simply two blanks of sheet material with practically no waste of material. The locking

flap 42 may have its opposite side walls straight but they are preferably converging as shown in order to facilitate the movement of the locking flap 42 into the outer container in which it is slidable.

It will now be apparent that I have devised a new and useful duplex container which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described preferred embodiments thereof which will give in practice satisfactory and reliable results, it is to be understood that these embodiments are susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:

1. In a duplex container, an outer container comprising telescoping sections having weakened lines on which they can be severed, inserts in said sections comprising foldable blanks having the marginal closures of the delivery opening provided with weakened lines and with a closing fold, the juxtaposed closing folds being in proximity to the weakened lines of said sections whereby when the outer container is severed on its weakened lines two separate and independent containers will be formed each comprising an outer box formation with an open top and its insert slidable therein, said insert when drawn outwardly and bent outwardly on its weakened lines causing when returned to its box a pressure on the articles contained therein.

2. In a duplex container, a rectangular blank of sheet material foldable to form a body portion having a bottom, closed sides, a closed end, with the other end having sealing flaps extending inwardly and laterally from the sides, and a cover having a closed top, closed sides, a closed end, with the opposite end open, and with the closed top connected by a fold with said bottom, said cover having a weakened line extending across its top and sides, and said body portion having a weakened line extending across its bottom and sides in alignment with the weakened line of the cover when the latter is closed.

3. In a duplex container, a rectangular blank of sheet material foldable to form a body portion having a bottom, closed sides and closed end, with the other end having sealing flaps extending inwardly and laterally from the sides, and a cover in telescoping relation with said body portion having a closed top, closed sides, a closed end, with the opposite end open, and with the closed top connected by a fold with said bottom, said cover having a weakened line extending across its top and sides, and said body portion having a weakened line extending across its bottom and sides in alignment with the weakened line of the cover when the latter is closed.

WILLIAM A. RINGLER.