July 7, 1936. W. A. RINGLER 2,046,485

DUPLEX CONTAINER

Filed Sept. 14, 1932

Fig. 1.

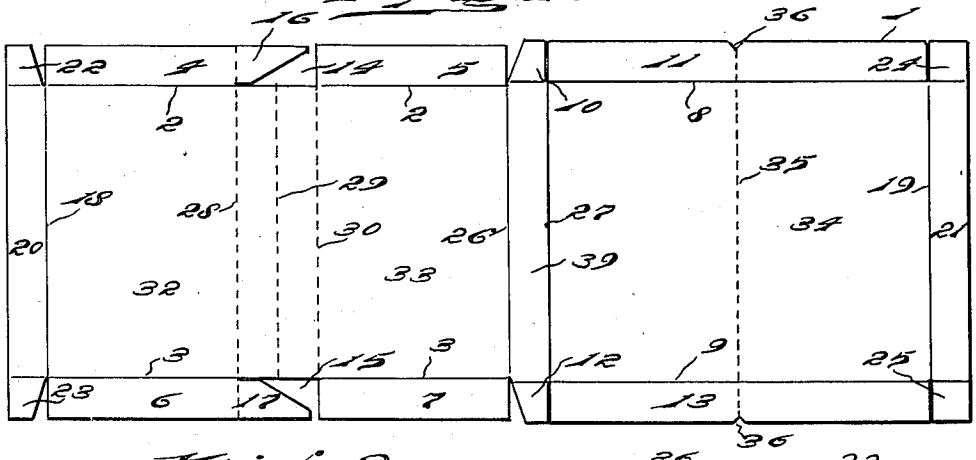


Fig. 2.

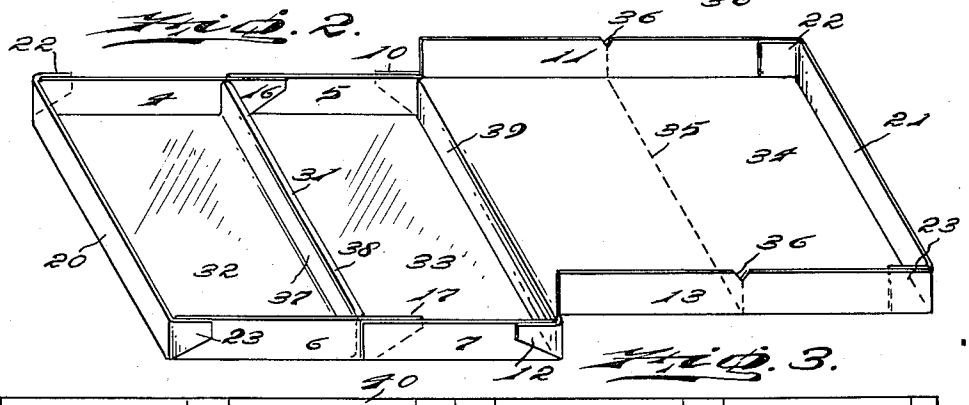


Fig. 3.

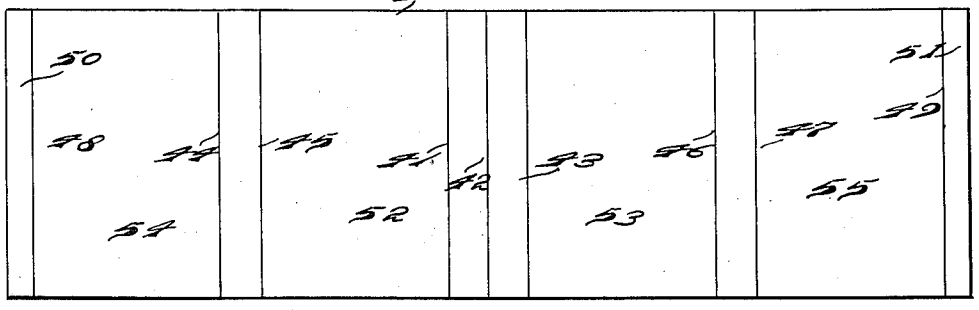


Fig. 6.

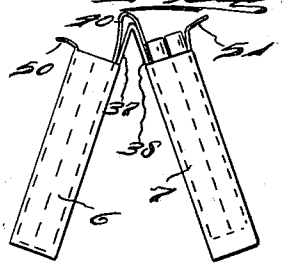


Fig. 5.

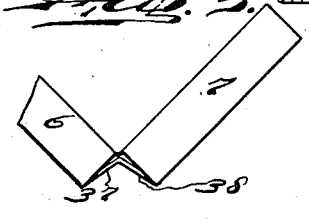
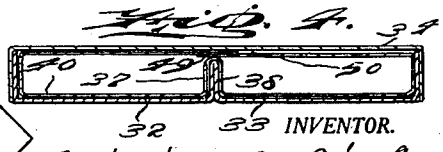


Fig. 4.



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UNITED STATES PATENT OFFICE

2,046,485

DUPLEX CONTAINER

William A. Ringler, Wayne, Pa., assignor to Carton Container Company, Philadelphia, Pa., a corporation of Delaware

Application September 14, 1932, Serial No. 633,179

6 Claims. (Cl. 229—27)

In a co-pending application I have described and broadly claimed a novel duplex container comprising a pair of open ended boxes with a side wall of each box interconnected by folds forming closures for such open ends, and a wrapper is provided which maintains the container in assembled and sealed condition, the boxes being adapted to be opened by the breaking of the wrapper.

In my present invention I have devised a novel construction and arrangement of a duplex container in which the wrapper may be dispensed with and a different construction of box forming blanks and boxes are employed.

An object therefore of this invention is to devise a novel duplex container wherein two boxes and a cover common to both boxes is formed from a single blank of sheet material, the cover being provided with a weakened line whereby two separate but independent boxes or containers may be formed, one of which may be folded on the other to form a unitary package, or as the articles in one box are used up it can be torn off so that a single box will be left containing articles to be used.

With the above and other objects in view, as will hereinafter more clearly appear, my invention comprehends a novel duplex container.

It further comprehends a novel construction of a blank adapted to form two separate boxes with a common cover and an intermediate partition forming a closure for the open end of each box and also a breaking edge on which the cover of the box can be broken to separate the container into two open ended interconnected boxes.

It further comprehends a novel duplex container having folds or flaps adapted to be glued together to form a duplex box with an open top and a common cover for the two boxes, and with weakened lines to provide for the breaking of the box into two separate boxes.

It further comprehends a novel duplex container comprising two open ended interconnected boxes and a novel construction and arrangement of a wrapper for the articles having at its free ends folds which overlap when the boxes are in closed position, and which when the container is opened form grasping portions to facilitate the removal of the articles from their boxes.

The cover may be glued or otherwise secured to the two boxes and if the articles are such that a duty has to be paid on them the revenue stamp may be used, if desired, to seal the cover to the box.

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 a typical embodiment of it, which, in practice, will give reliable and satisfactory results. It is, however, to be understood that this embodiment is typical only and that the various instrumentalities of which my invention consists can be variously arranged and organized, and the invention is not limited to the precise arrangement and organization of these instrumentalities as herein set forth.

Figure 1 is a top plan view of a blank from which my novel duplex container is formed.

Figure 2 is a perspective view of the box from which the duplex container is formed, in its open position.

Figure 3 is a top plan view of a wrapper for the articles, such as, for example, the conventional combined tissue paper and tin foil which it is customary to use in wrapping cigarettes.

Figure 4 is a sectional view of the duplex container in its closed condition, showing more particularly the position the wrapper assumes when the boxes are closed and sealed.

Figure 5 is an end elevation showing the position the parts assume after the first step of breaking the box in two.

Figure 6 is an end elevation of the box in its open position and also showing the manner in which cigarettes, or other articles, are withdrawn from the box to render them more readily accessible to the user.

Similar numerals of reference indicate corresponding parts.

Referring to the drawing:—

In Figure 1, I have shown a blank 1 from which the box is formed. This blank is cut from a single sheet of sheet material, such as, for example, paper, cardboard, or any other suitable material, depending upon the character of goods which are to be packed within the duplex container. The blank is provided with the weakened lines 2 and 3 which contribute to form the end folds 4, 5, 6, and 7. I provide an offset extension of the weakened line 2, as shown at 8, and also an offset extension of the weakened line 3, as shown at 9. The weakened line 8 contributes to form the tab 10, the end fold 11, and in a similar manner the weakened line 9 forms a tab 12, and an end fold 13.

It will be seen that the end folds 4 and 5, and the end folds 6 and 7 are not continuous but are

cut out as indicated at 14 and 15, respectively, to form the tabs 16 and 17, respectively, the cut continuing along the weakened line 3 as indicated in Figure 1. At the free ends of the blank marginal weakened lines 18 and 19 are provided which contribute to form the end folds 20 and 21, respectively, the fold 20 being provided with the side tabs 22 and 23, and in a similar manner, the end fold 21 is provided with the side tabs 24 and 25. I provide a weakened line 26 defining the center fold of the box, and a weakened line 27 defining the center fold of the cover portion. I also provide the weakened lines 28, 29 and 30, which provide for forming a partition 31 between the two boxes, having the bottom walls 32 and 33. The cover 34 is provided with a weakened line 35 extending transversely across it and terminating in the notched out portions 36.

The blank is now formed into the box construction seen in Figure 2. In order to form the box the sides forming the bottom members 32 and 33 are brought together so that the partition 31 is formed by the folds 37 and 38. The tab 16 is then glued to the side 5, and the tab 17 is secured by adhesive to the side fold 7. The end fold 20 is then bent over and the tab 22 secured to the side fold 4, and the tab 23 to the side fold 6, it being of course understood that the side folds 4 and 5, and the side folds 6 and 7, have been folded upwardly into the position seen in Figure 2. The fold 39 formed by the weakened lines 26 and 27, is now bent up and secured in position, the tab 10 being secured to the fold 5, and the tab 12 being secured to the fold 7. In a similar manner, the fold 21 is bent up, and the tab 22 secured to the fold 11, and the tab 23 secured to the fold 13. The box is now completed with its cover.

If articles, such as, for example, tobacco in the form of cigarettes or cigars, are to be placed in the container, it is advisable to place a lining or wrapper in the box, such as, for example, the liner 40, formed from sheet material, such as, for example, tissue and tin foil. This liner, if used, is provided with the weakened lines 41, 42, and 43, to facilitate its embracing the partition 31. The blank is also provided with the weakened lines 44, 45, 46, 47, 48, and 49. The weakened line 48 contributes to form the overlapping flap 50 which forms a grasping portion, and, in a similar manner, the weakened line 49 contributes to form a flap 51, which, when the box is closed overlaps the flap 50 and also forms a grasping handle. This overlapping of these flaps serves as a protection for the weakened line 35 of the cover 34.

Assuming now that the cigarettes have been placed in the box with the wrapper inside the box, the cover is closed and, if desired, is glued or otherwise secured to the side walls of the box, the parts appearing as shown in Figure 4.

When the user desires to open the box he bends opposite portions upwardly as shown in Figure 5, the tabs 16 and 17 are torn in two, and the perforated portions of the line 35, on the folds 11 and 13, is broken. The user then bends the opposite sides of the box in the opposite direction thereby separating the cover along the weakened line 35. The upper edge of the partition 31 forms a breaking edge along which the cover is separated. This partition 31 has several different functions. It serves as a partition or separation between the two boxes. It also serves as a breaking edge for defining the location at which the duplex container is to be separated. It also serves as a hinge connection so that the two boxes can be folded together, after being opened, one upon the other. It also serves as an intermediate reinforcement when the container is closed to prevent bulging or deformation at its central portion. It also serves as a closure for both open ended boxes when in an open or closed condition.

When it is desired to remove an article from a box, the articles can be brought into a position readily accessible to the user, by raising the grasping handle 50, or the grasping handle 51.

It will be apparent that the duplex container, when in open position, comprises two open ended boxes interconnected by the partition 31 formed by the folds 37 and 38.

In my present construction I form two connected boxes and a cover from a blank of material, the cover being common to both boxes and formed from the same blank. When the boxes are separated the separation of the boxes forms the two open ended boxes instead of forming two open ended boxes by the separation of a wrapper, as in my copending application, aforesaid.

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 a preferred embodiment thereof which will give in practice satisfactory and reliable results, it is to be understood that this embodiment is 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, a double compartment box formed from a blank of material having a weakened line providing for the folding of the box to form two opened top boxes with a double foldable partition between them and with their side walls connected and a cover common to the two boxes, said cover having a weakened line registering with said folded partition and extending across the top and side walls of the cover to provide for the breaking of the boxes by the breaking of the cover and the bending of the container in opposite directions to form two open ended boxes interconnected by said double wall partition.

2. A duplex container formed from a single blank of material having weakened lines providing for the folding of the blank to form overhanging end portions secured together with a double wall partition forming two opened top boxes connected together at the sides and with a cover common to the two boxes and secured to the side walls thereof, said cover having a weakened line extending across its top and side walls in registry with said partition when the cover is closed and said container having its side walls weakened in proximity to said double partition.

3. A duplex container, comprising a pair of open boxes having their side walls secured together and separated by a double wall partition integral with the boxes and with a cover integral with a wall of the box, said cover having a weakened line extending across its top and side walls in registry with said partition and said container having its side walls weakened in proximity to said double partition.

4. A duplex container formed from a single sheet of material substantially rectangular and

having two opened top boxes with the side walls connected and with a folded double partition connecting the bottom of the boxes and dividing them into two boxes, connected together at the sides, and a cover for said boxes secured to the side walls thereof, said cover having a hinge connection with the rear wall of the rear box, a front wall secured to the front wall of the front box and side walls secured to the side walls of the boxes and having a weakened line extending across its top and side walls in registry with said partition.

5. A duplex container having a double fold forming a partition between opposite sides, the opposite sides being secured together with the sides having weakened portions in proximity to said partition, the juxtaposed sides of the two boxes forming a continuous side when secured together, and a cover secured to the sides of said boxes and having a weakened line in registry with said double fold when folded and extending across the side walls whereby when the container is bent in one direction the cover will be severed and when bent in the opposite direction opposite connections between common sides of the box will be broken to form two open ended boxes connected only by said double fold.

6. A duplex container having two opened top boxes with a double fold partition between the boxes and with the sides having weakened portions on which they are adapted to be broken in proximity to said partition, and a cover common to the two boxes and having a weakened line in registry with said partition when folded and extending across the side walls of the cover.

WILLIAM A. RINGLER.