May 11, 1937. W. A. RINGLER 2,079,815

DUPLEX CONTAINER

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Fig. 1.

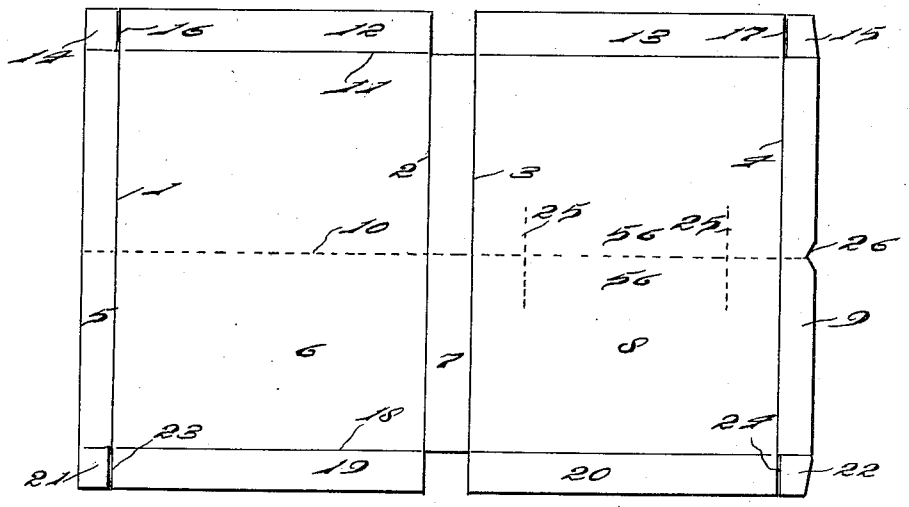


Fig. 2.

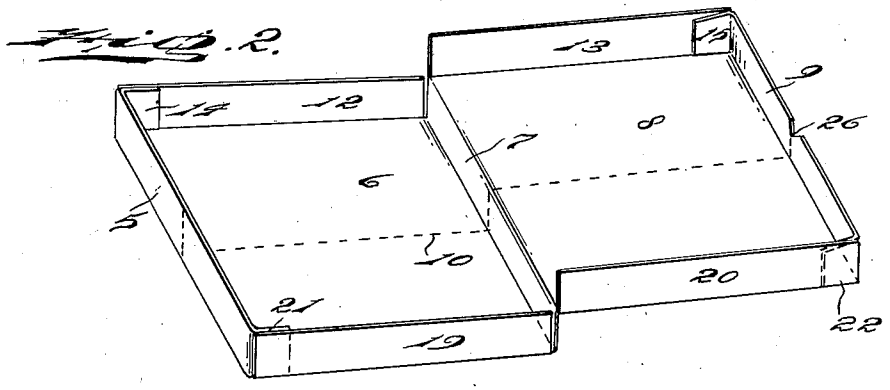
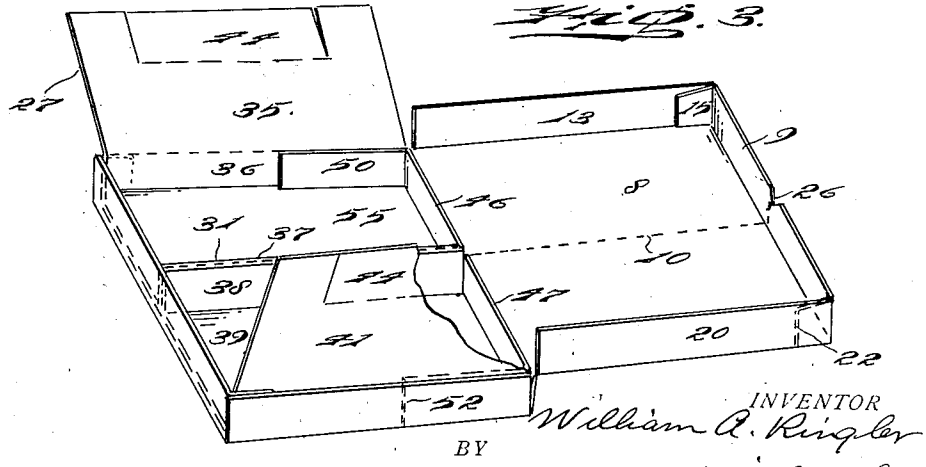


Fig. 3.



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Fig. 4.

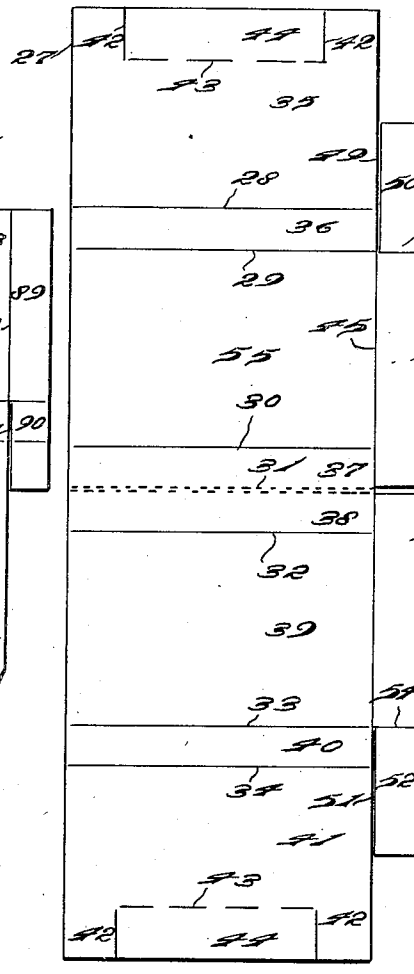


Fig. 11.

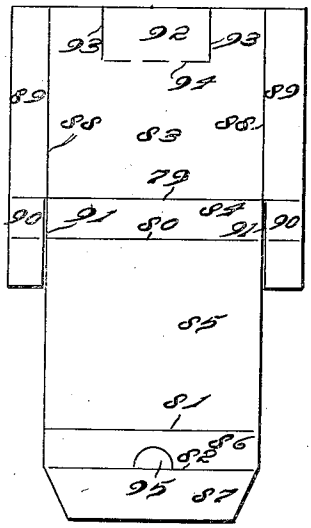


Fig. 6.

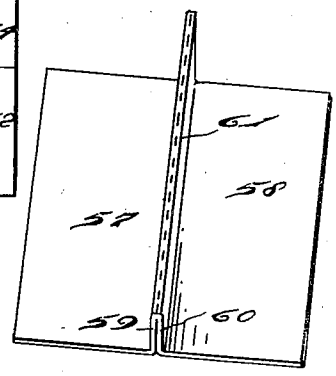
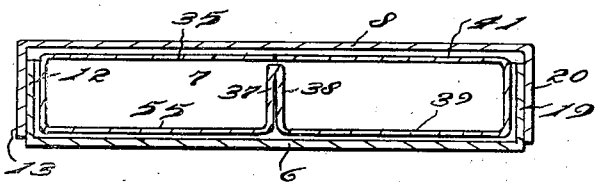


Fig. 5.



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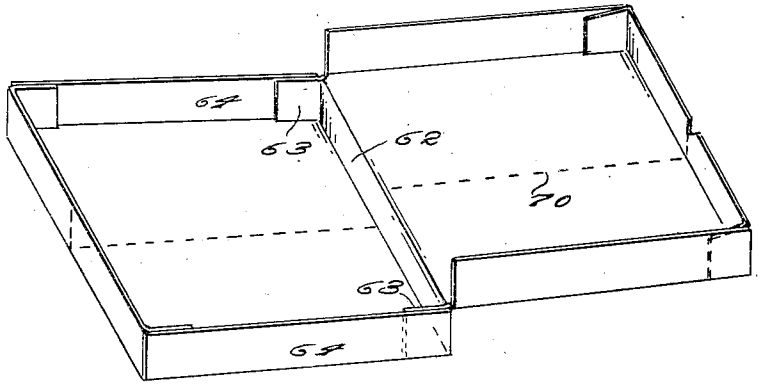
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Fig. 7.



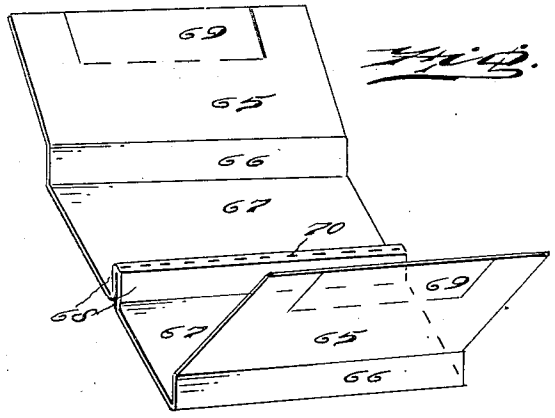


Fig. 8.

Fig. 9.

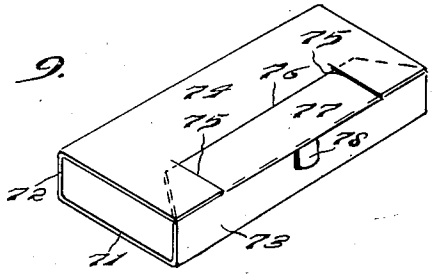
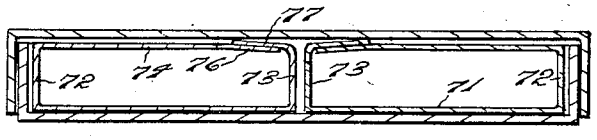


Fig. 10.



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2,079,815

DUPLEX CONTAINER

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

Application September 28, 1932, Serial No. 635,180

5 Claims. (Cl. 229—15)

In my co-pending applications Serial No. 633,178 and Serial No. 633,179, I have described and broadly claimed novel forms of duplex containers wherein the container is formed from a blank which can be folded to form a container having a body portion and a cover with duplex compartments separated from each other, the container or box thus formed being capable of being broken in two to provide two separate and independent containers.

My present invention relates to a duplex container of this general type but instead of having the partition formed by the box the partition is formed by the liner.

With the above in view, the object of this invention is to devise a novel construction and arrangement of a duplex container in which the box portion can be readily formed by box-making machinery now in use. The liner can also be readily constructed from sheet material by machinery now in use so that when the parts are assembled a duplex container is provided which can be manufactured at a minimum cost and which can be readily separated into two separate and independent containers, if desired.

A further object of the invention is to devise a novel container which will provide for a single outer box and two separate boxes within the outer box, the outer box being adapted to be broken in two to form two independent boxes.

With the above and other objects in view, as will more clearly hereinafter appear, my invention comprehends a novel duplex container having a novel insert or lining, which latter forms a breaking edge on which the box can be broken in two to form two independent and separate boxes.

It further comprehends a novel duplex container wherein the body portion and cover of a box are provided with a weakened line for breaking the box in two, the bottom of the body portion having an insert or liner, preferably secured to its bottom, and folded to provide two compartments with a double partition between them and with cover portions which contribute to form two independent boxes when the cover and liner are broken apart.

It further comprehends a novel duplex container in which an outer box is formed consisting of a body portion and a cover and an insert is provided having a double partition to separate it into two compartments each of which is provided with a closing cover portion and a locking tab, the cover portions being weakened or slit to provide for the interlocking of the tabs therewith.

It further comprehends a novel duplex container wherein an outer box is formed consisting of a body portion and a cover and within the body portion of the outer box is contained two separate and independent boxes juxtaposed walls of which form a breaking line along which the outer box can be separated into two sections, each of such sections containing an inner 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 drawings 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 top plan view of a box blank embodying my invention.

Figure 2 is a perspective view of the box formed from the blank seen in Figure 1.

Figure 3 is a perspective view of a duplex container embodying my invention, formed from the box seen in Figure 2, with a novel construction of an insert or liner.

Figure 4 is a plan view of the insert blank seen in Figure 3.

Figure 5 is a sectional view of a duplex container provided with the insert seen in Figure 4.

Figure 6 is a perspective view of another construction of insert embodying my invention.

Figure 7 is a perspective view of a box embodying my invention and forming a portion of my duplex container.

Figure 8 is a perspective view of an insert or filler embodying my invention, adapted to be secured in a box, such as is shown in Figure 2 or Figure 7.

Figure 9 is a perspective view of another embodiment of an insert seen in Figure 10.

Figure 10 is a sectional view of a box or duplex container having individual inserts.

Figure 11 is a plan view of another form of blank for forming a box insert.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:

Referring first to the embodiment seen in Figures 1, 2, and 3, the box blank is provided with

the transversely extended weakened lines 1, 2, 3, and 4, which contribute to form an end wall 5, a bottom 6, an end wall 7, the cover 8, and a fold 9. A weakened line 10 extends longitudinally of the blank. The blank is also provided with the weakened line 11 forming end folds 12 and 13 and the tabs 14 and 15. The end fold 12 being separated from the tab 14 by a slit 16, and the fold 13 being separated from the tab 15 by a slit 17. A weakened line 18 contributes to form the folds 19 and 20 and the tabs 21 and 22, the fold 19 being separated from the tab 21 by a slit 23, and in a similar manner the fold 20 being separated from the tab 22 by a slit 24. The cover 8 is provided with the transversely weakened lines 25 which extend across it and are spaced from each other to form tabs 56. When the box is assembled the tab 14 is glued to the fold 12, see Figure 2. The tab 21 is glued to the fold 19. The tab 15 is glued to the fold 13, and the tab 22 is glued to the fold 20. The outer box is now formed. The cover fold 9 is provided with a notched-out portion 26 to facilitate the breaking of the box in two on the line 10.

27 is the insert or filler which is formed from a single sheet of material, as shown in Figure 4, which shows the blank. The blank is provided with the transversely extending weakened lines 28, 29, 30, 31, 32, 33, and 34, which contribute to form a cover fold 35, an end fold 36, the partition folds 37 and 38, the bottom fold 39, an end fold 40, and a cover fold 41. Each cover fold 35 and 41 is provided with the slits 42, and the weakened lines 43, which contribute to form the tabs 44. A weakened line 45 contributes to form end folds 46 and 47, which are separated by a slot 48, and a slit 49 is provided forming a fold 50. In a similar manner at the opposite end of the blank a slit 51 is provided contributing to form a fold 52. A weakened line 53 is provided between the folds 46 and 50, and a weakened line 54 is provided between the folds 47 and 52.

The blank of Figure 4 is now folded on the lines 30 and 32 to provide an upstanding wall formed by the folds 37 and 38, and it is also folded on the lines 29 and 33 so that it will fit into the bottom 6, as shown in Figure 3. The folds 50 and 52 are folded inwardly and with the folds 46 and 47, folded into the position seen in Figure 3. The bottom folds 55 and 39 are glued or otherwise secured to the bottom 6 of the box, and the box is now ready to receive the articles, such as, for example, cigarettes, which are placed in the two compartments, the cover folds 35 and 41 are then folded downwardly into the position seen in Figure 5, and the cover is closed and secured in position in any desired manner.

It will thus be seen that I provide two inner boxes contained in the body portion of the outer box. When the duplex container is to be opened it is broken apart on the line 10, the wall formed by the folds 37 and 38 forming a breaking line along which the box is severed. The cover is severed, and the box is bent at the cover portion to break at the lines 42, so that locking tabs 44 are provided on the cover sections which coincide with the tabs 56 and can be folded outwardly therewith to provide access to each individual box.

In the form seen in Figure 6 the insert blank is provided with weakened lines to form the bottom folds 57 and 58, and the partition folds 59 and 60, which are separated by a weakened line 61.

In this form of the invention the blank is folded into the form seen in Figure 6, it being understood that this is on a reduced scale, so that these folds will fill the bottom 6 and can be glued thereto and the partitions 57 and 58 will be on the line 10. The box is broken in a similar manner to that already described with respect to Figures 2 and 3, to form separate and independent containers.

In the embodiment seen in Figure 7, the box is similar to that shown in Figure 2 except that the side fold 62 is provided with tabs 63 which are glued to the juxtaposed folds 64. The insert is shown in Figure 8 and is formed from a blank sheet of material having the weakened lines contributing to form the cover folds 65, end folds 66, bottom folds 67, and the partitioning folds 68. The tabs 69 in the cover folds are similar to those already described.

It will be apparent that in this form of my invention the box is broken on the weakened line 70 in the double wall partition formed by the fold 68.

In the form shown in Figure 10, the outer box of the duplex container is constructed as in Figures 2 or 7, and within this outer box is placed two box-forming members as shown in Figure 9, consisting of a sheet of material folded upon itself to form a bottom fold 71, side folds 72 and 73, a top fold 74 having slits 75 to form a tab 76, and a locking tab 77 which is insertable beneath or above the tab 76. The two box members thus formed are glued to the bottom portion of the outer box so that a double wall partition is formed along the breaking line 70 or 10 of the outer box. A tab 78 may be employed if desired for the locking fold, as shown in Figure 9.

It will be apparent that when the box is broken in two, two separate and independent boxes are provided each of which has its own locking tab.

In the form seen in Figure 11, the insert is provided with the weakened lines 79, 80, 81, and 82, which contribute to form the bottom fold 83, the end fold 84, the top fold 85, the end fold 86, and the locking tab 87. The blank has the weakened lines 88 which contribute to form the side folds 89, and the tabs 90 which are separated from the blank by the slits 91. The locking tab 92 is formed by the slit 93 and the weakened line 94. An opening tab 95 may be provided if desired.

In this form of my invention the bottom fold 83 is glued to the bottom of the outer box, the folds 90 are then turned inwardly, and the folds 89 upwardly, the fold 84 is then bent upwardly and the cover 85 folded over so that a box formation is provided, the fold 86 forming the side wall and the tab 87 being adapted to be inserted under or over the tab 92 to retain the box in closed condition.

It will now be clear that when two of these boxes have been secured in the outer box that the outer box will be broken along the double partition formed by juxtaposed side walls of the boxes.

In all of the embodiments of my invention as herein shown the insert is provided with a double partition forming a wall or breaking edge along which the outer box is separated to provide two separate and independent containers or packages.

In all of the embodiments of my invention the cover of the outer box is preferably glued or otherwise secured to the side walls of the body portion of the box and the cover sections have tabs which

can be folded outwardly to provide access to the articles in the two separate containers.

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 box having a body portion with closed side walls and a cover with closed side walls hinged thereto, said box having a weakened line extending around it, and an insert comprising a single blank folded into a double box formation having a double walled partition extending across the box in proximity to said weakened line with its upper edge forming a breaking edge in proximity to said weakened line whereby the container when broken on said weakened line and the double wall partition broken at its top edge to form separate walls will form two separate and independent boxes.

2. In a duplex container, an outer box comprising a body portion with closed side walls and a cover with closed side walls, and an insert adapted to be received in the bottom of said body portion and having a double fold contributing to form two compartments, said insert being adapted to be folded into box formation, and said cover having with said body portion a weakened line in proximity to said double fold along which said body portion and cover are separated and also said double fold to form two separate and independent containers.

3. In a duplex container, an outer container comprising a body portion with closed side walls and a cover with closed side walls secured thereto, and an insert secured in said body portion, and having weakened lines contributing to form bottom folds, a double walled partition having a weakened line at its upper edge extending across the container, side folds, top folds, and end folds adapted to close compartments formed by said partition at one end, and said outer container having a weakened line around it in proximity to said partition and on which it is adapted to be separated to form when the partition is separated on its weakened line two separate and independent containers.

4. In a duplex container, an outer container comprising a blank of sheet material having weakened lines and folded to form a body portion with closed side walls and a cover with closed side walls secured to the body portion, with one of said weakened lines surrounding the container and along which it is adapted to be separated, and an insert comprising a folded blank folded into a double box formation having bottom folds and a double walled partition extending across the container in proximity to the weakened line surrounding the container forming a breaking edge along which it can be severed with said outer container to form when the double walled partition is severed two separate and independent containers.

5. The combination with an outer box consisting of hinged telescoping sections with closed side walls having a weakened line surrounding it, of an insert within said box, foldable to form two separate boxes with a double wall partition along said weakened line, the meeting edges of the walls of said partition forming a breaking edge in registry with said weakened line and on which the outer box is broken whereby when the partition is also severed two separate and independent boxes are provided formed of sections of said insert and outer boxes.

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