

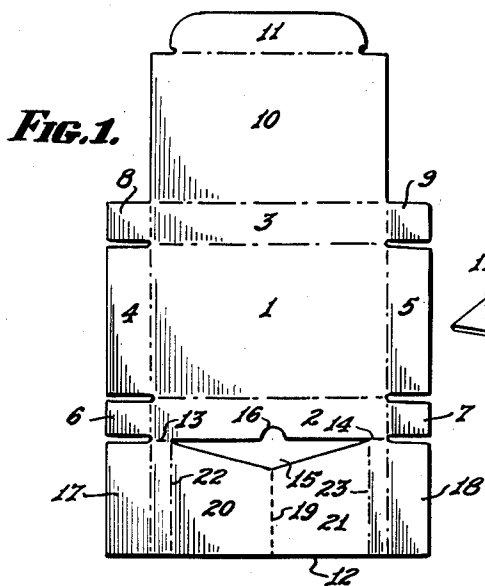
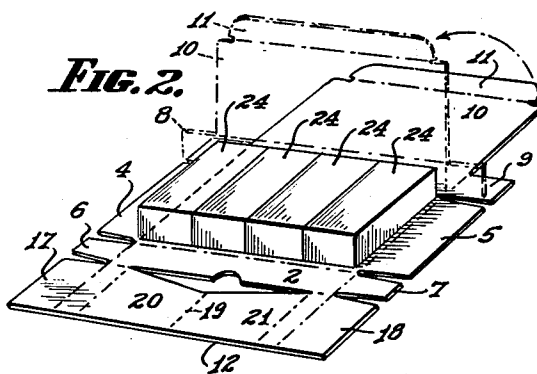
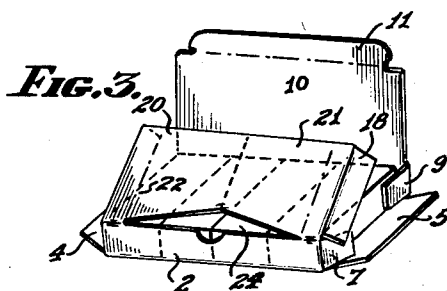
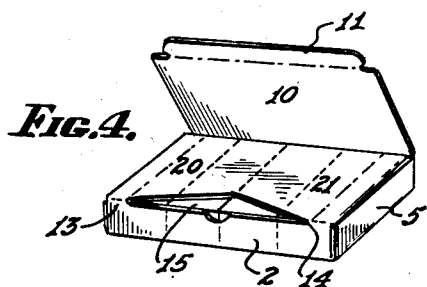
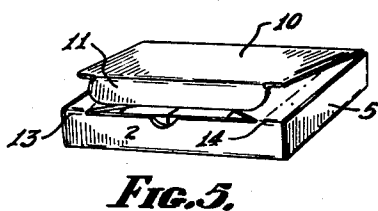
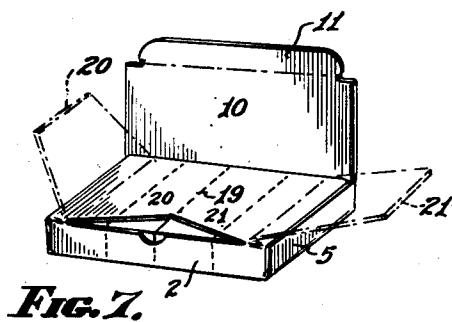
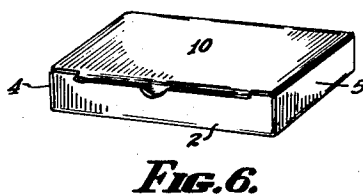
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TAMPER PROOF CARTON

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TAMPER PROOF CARTON

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4 Claims. (Cl. 229—33)

My invention relates to paperboard cartons and more particularly to a hinged lid carton in which merchandise may be packaged, the construction of the carton being such that the merchandise, once packaged, can be removed only by tearing apart the carton structure, thereby giving a visible indication that someone has tampered with its contents.

Tamper proof cartons of the character herein contemplated find a wide range of utility in the packaging of automotive parts and the like wherein there is an opportunity for spurious or used parts to be substituted for the original factory parts. Of course, the utility of my invention is not so limited and will be useful for the packaging of diverse materials wherein it is desirable for the user to have assurance that packaged goods is in as-packed condition.

It is, therefore, a principal object of my invention to provide a tamper proof carton essentially in the form of a hinged lid box, the structure being provided with an inner cover member which must be torn apart or otherwise mutilated in order to gain access to the contents.

Another object of my invention is the provision of a tamper proof carton formed from a one piece blank in which the parts are adhesively secured together in such fashion that the carton can be opened only by mutilating it.

Still a further object of my invention is the provision of a tamper proof carton of the character described which, when opened in the intended manner, will provide a hinged lid structure capable of being reused until all of the contents have been dispensed and the carton discarded.

The foregoing, together with other objects of my invention which will appear hereinafter or which will be apparent to the skilled worker in the art upon reading these specifications, I accomplish by that construction and arrangement of parts of which I shall now describe an exemplary embodiment.

Reference is now made to the several figures in the drawings forming a part hereof, wherein:

Figure 1 is a plan view of a carton blank in accordance with my invention.

Figure 2 is a perspective view illustrating the manner in which the merchandise to be packaged may be assembled on the blank and the folding of the blank initiated.

Figures 3, 4, 5 and 6 are perspective views illustrating successive stages in the assembly of the box blank into a closed and sealed package.

Figure 7 is a perspective view illustrating the manner in which the carton may be opened for use.

Referring now to Figure 1 of the drawings I have therein illustrated a carton blank in accordance with my invention, it being understood that the blank will be formed from a suitable weight paperboard which will be cut and scored to define the various component parts of the structure. The blank has a centrally disposed bottom panel 1 having articulated thereto a front wall 2, a rear wall 3, and end walls 4 and 5. End flaps 6 and 7 are articulated to the end edges of the front wall 2; and

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similar end flaps 8 and 9 are articulated to the end edges of the rear wall 3.

A cover panel 10 is hingedly connected to the remaining side edge of the rear wall 3, and along its outer edge the cover panel carries a tuck flap 11 which, in a preferred embodiment of the invention, terminates short of the end edges of the cover panel, in substantially the manner illustrated. At the opposite end of the blank an inner cover panel 12 is hingedly connected to the front wall 2 adjacent the ends thereof along the short lines of articulation 13 and 14. Preferably, the cover panel will have a triangular portion thereof removed to define a triangular opening 15 lying between the remainder of the inner cover panel and the front wall. I also prefer to provide a finger opening 16 in the front wall, as will be clearly apparent from the drawings. At its ends the inner cover panel 12 has end wall parts 17 and 18 articulated thereto, the end wall parts 17 and 18 corresponding essentially to the end walls 4 and 5 articulated to bottom panel 1. In addition, the inner cover part is provided with a medially disposed line for severance 19 dividing the inner cover part into panel sections 20 and 21. As will become clear hereinafter, these panel sections are adapted to be folded along the hinge lines 22 and 23 which extend parallel to but are spaced inwardly from the end edges of the inner cover panel by a distance substantially equal to the length of the short lines of articulation 13 and 14.

In assembling the blank just described into a carton structure, the contents to be packaged therein may be first positioned on the bottom wall of the blank, as illustrated by the containers 22 seen in Figure 2 which, for example, might each contain a spark plug or other article of merchandise. Subsequent to the positioning of the contents on the bottom panel 1, the front, rear and end walls of the blank may be erected, in the manner illustrated in Figures 3 and 4, thereby juxtaposing the end flaps 6-9 to the ends of the carton, accompanied by the adhesive securement of the end walls, the end flaps and the end wall parts 17 and 18 of the inner cover panel. The order in which these parts are secured is a matter of indifference and will depend upon such factors as the equipment employed to assemble the carton and also the manner in which the carton is printed. For example, the end walls 4 and 5 may be first folded to a vertical position, whereupon the front and rear walls 2 and 3 may be folded upwardly followed by the infolding and adhesive securement of the end flaps 6 through 9 to the outermost surfaces of the end walls 4 and 5, whereupon the inner cover member 12 may be folded to overlie the contents and the end wall parts 17 and 18 folded downwardly and adhesively secured to the outermost surfaces of the end flaps. Alternatively, the folding of the parts may be such that the end wall parts 17 and 18 will lie to the inside with end walls 4 and 5 outermost. In addition, it may be pointed out that the front, rear and end walls of the structure may be first erected and assembled, thereby forming a complete carton bottom, whereupon the contents may be placed in the partially erected carton and the inner cover part thereafter infolded over the contents and the end wall parts secured to the end walls of the carton body.

Subsequent to the sealing of the contents in the carton by means of the inner cover panel, the outer cover panel 10 will be infolded and secured in place by means of the tuck flap 11. The flap 11 may be inserted through the opening 15 so as to lie between the contents 22 and the front wall 2 of the carton, and to this end, the flap 11 will have a length corresponding to the length of the opening 15. Alternatively, and if it is desired to fully seal the carton, the flap 11 may be positioned outermost and adhesively secured to the front wall 2 of the carton,

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In the latter event, it is preferred that the flap 11 be adhered to the front wall by means of a spaced apart series of adhesive spots which will permit the flap to be easily separated from the front wall 2. In this connection, the flap may be secured to the front wall by means of a band or spots of pressure sensitive adhesive, if so desired.

In the hands of the user, the outer cover 10 will be opened by disengaging the flap 11, whereupon access to the interior of the carton and its contents can be obtained only by tearing the inner cover panel 12 along the line for severance 19. This of course may be readily done, and to this end the triangular opening 15 facilitates the flexing of the inner cover panel and the tearing thereof along this line for severance. The separation of the inner cover panel along the line for severance results in the freeing of the panel sections 20 and 21 for folding along the lines of fold, the carton thus being opened in the manner illustrated in dotted lines in Figure 7. Upon removal of one or more of the articles contained therein, the carton may be readily reclosed by infolding the panel sections 20 and 21 followed by the closing of the outer cover 10 and the insertion of the tuck flap 11 between the panel sections and the front wall of the carton.

Modifications may, of course, be made without departing from the spirit of my invention. For example, while the inner cover part has been provided with lines of fold 22 and 23 spaced inwardly from the end edges of the part, it would be readily apparent that the lines of fold 22 and 23 may coincide with the lines of articulation connecting the end wall parts 17 and 18 to the inner cover panel. Similarly, the configuration of the carton structure, i. e. its dimensions, do not constitute a limitation on my invention nor does the specific configuration of the opening 15, although it will be understood that the opening 15 will be of a size such that the contents of the carton cannot be withdrawn through the opening without severing the inner cover panel along the lines for severance 19.

Having thus described my invention in an exemplary embodiment, what I desire to protect and secure by Letters Patent is:

1. In a tamper proof carton, a bottom part having a bottom wall, front, rear and end walls articulated to said bottom wall and permanently secured together at their end edges, an outer cover member hingedly connected to the upper edge of said rear wall, said cover member having a tuck flap extending along its free side edge, and an inner cover member hingedly connected to said front wall adjacent the end edges thereof, said inner cover member having an opening therein extending along the

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upper edge of said front wall intermediate its end edges, said inner cover member having end parts articulated to the end edges thereof, said parts being permanently secured to the end walls of said bottom part, and a line for severance dividing said inner cover part into a pair of foldable panel parts capable of being folded upwardly to gain access to the interior of said bottom part upon separation of said panel parts along said line for severance, said line for severance traversing said inner cover member and terminating at the opening therein.

2. The tamper proof carton structure claimed in claim 1 wherein the tuck flap on said cover member is of a size to extend through the opening in said inner cover member.

3. The tamper proof carton structure claimed in claim 1 wherein said panel parts are foldable along lines of fold spaced inwardly from the end edges of said inner cover part.

4. A tamper proof carton formed from a one-piece blank and having a bottom part composed of a bottom wall, front, rear and end walls connected to said bottom wall, attachment flaps connecting together the end edges of said front, rear and end walls, an outer cover member hingedly connected to the upper edge of said rear wall, said cover member having a tuck flap extending along its free side edge, and a sealed tamper proof panel interconnecting the upper edges of said end walls, said tamper proof panel being hingedly connected to said front wall along relatively short lines of articulation extending inwardly from the end of said front wall, said tamper-proof panel being separated from said front wall intermediate said short score lines, lines of fold in said tamper proof panel extending parallel to the end edges thereof and spaced inwardly from the ends of said panel by a distance equal to the length of said short score lines, said tamper proof panel having a centrally disposed line for severance therein by means of which said tamper proof panel may be separated into panel parts capable of being folded upwardly along the lines of fold therein to expose the contents of said carton body.

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