

April 19, 1938.

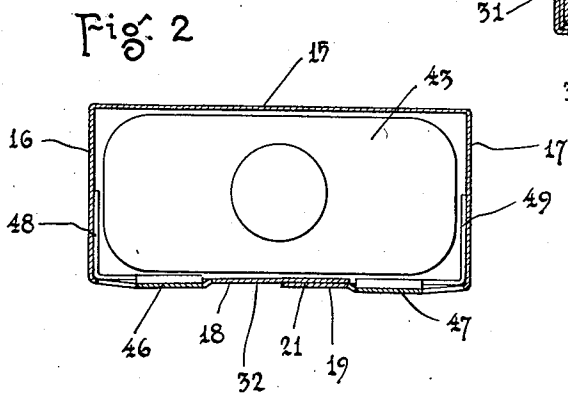
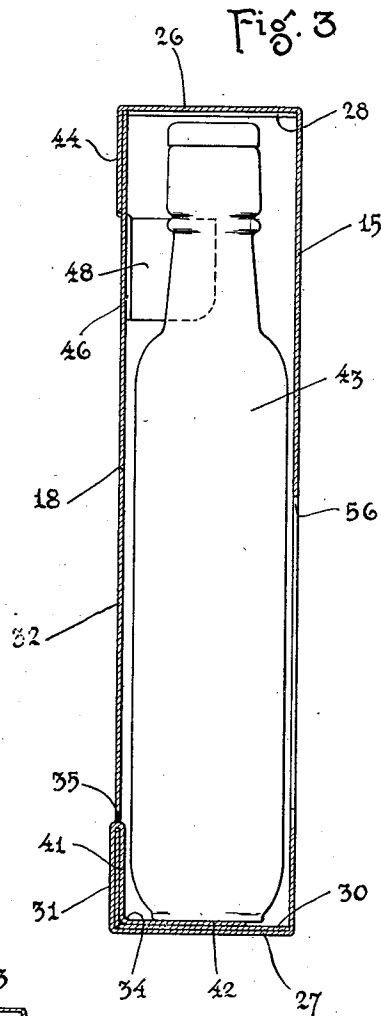
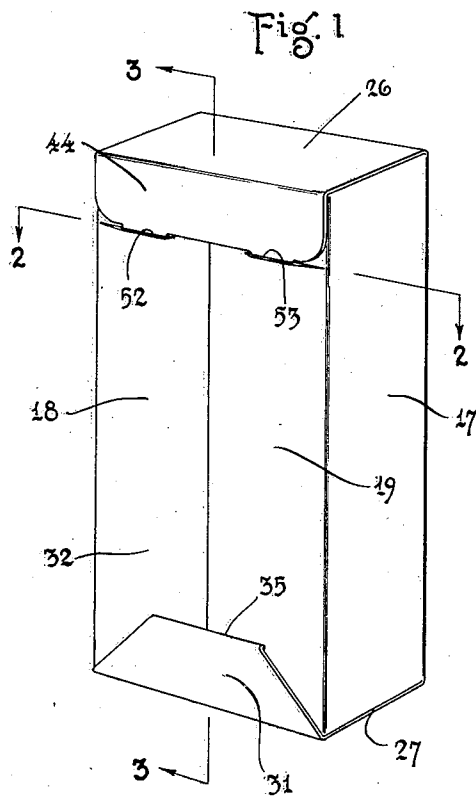
R. GUYER

2,114,422

BOX

Filed Jan. 20, 1934

4 Sheets-Sheet 1



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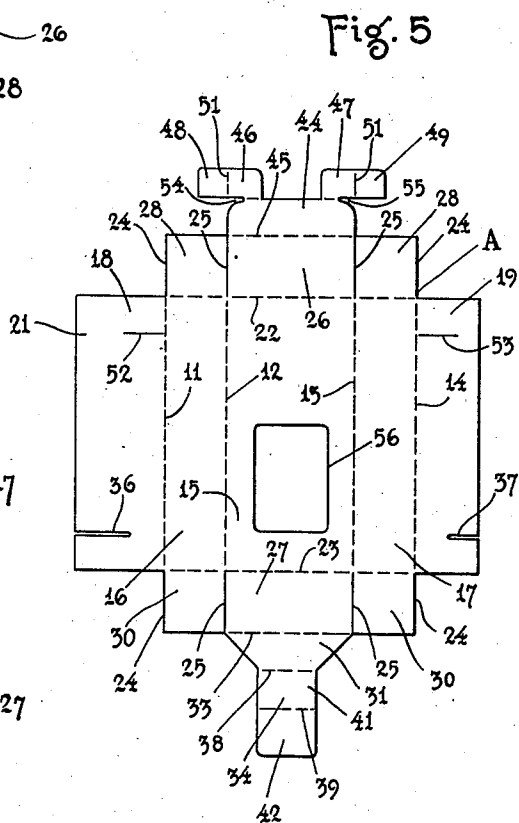
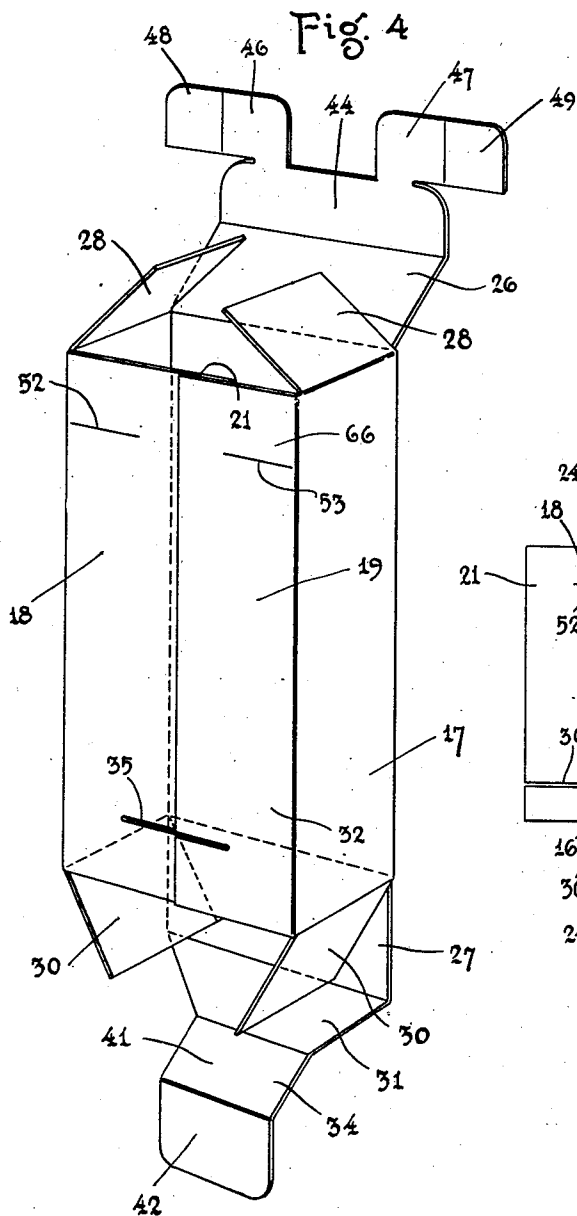
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4 Sheets-Sheet 2



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Fig. 6

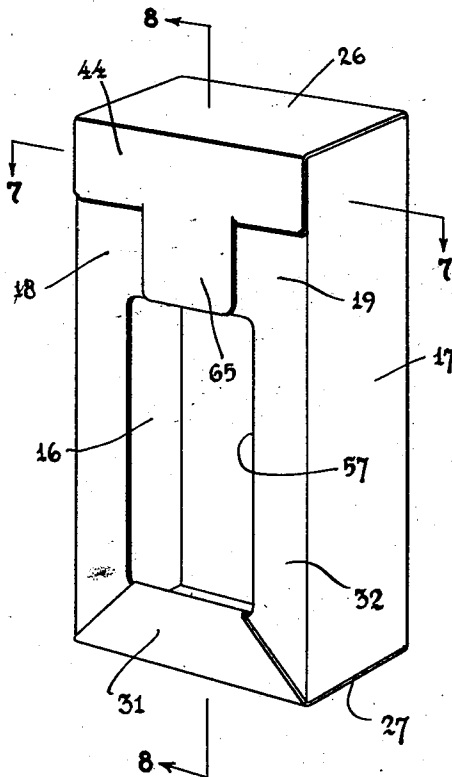


Fig. 8

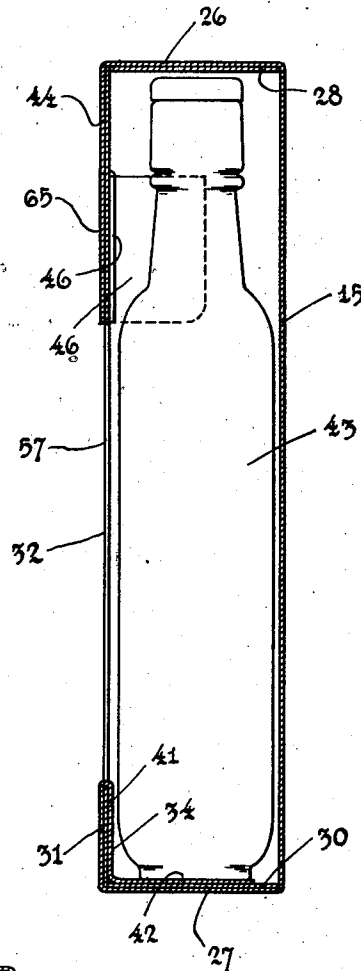
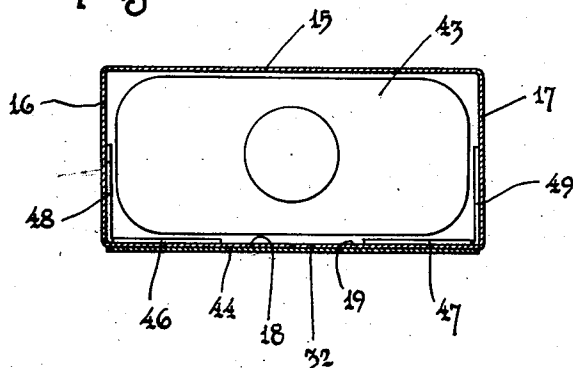


Fig. 7



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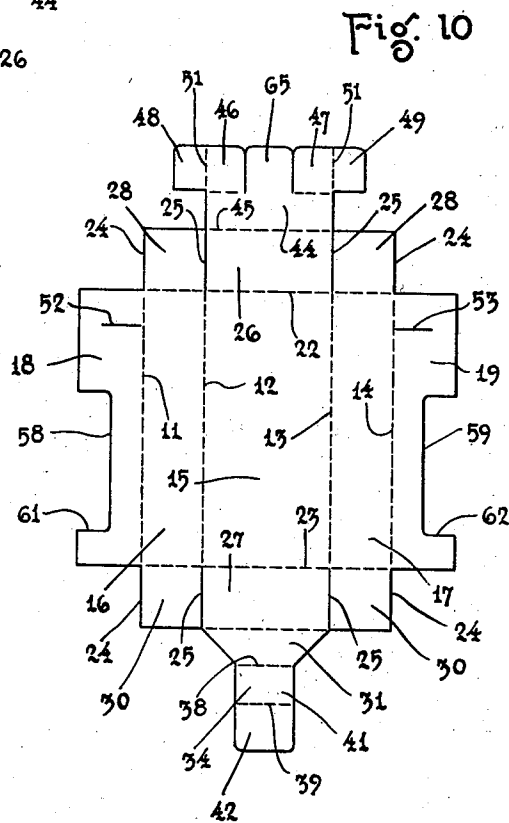
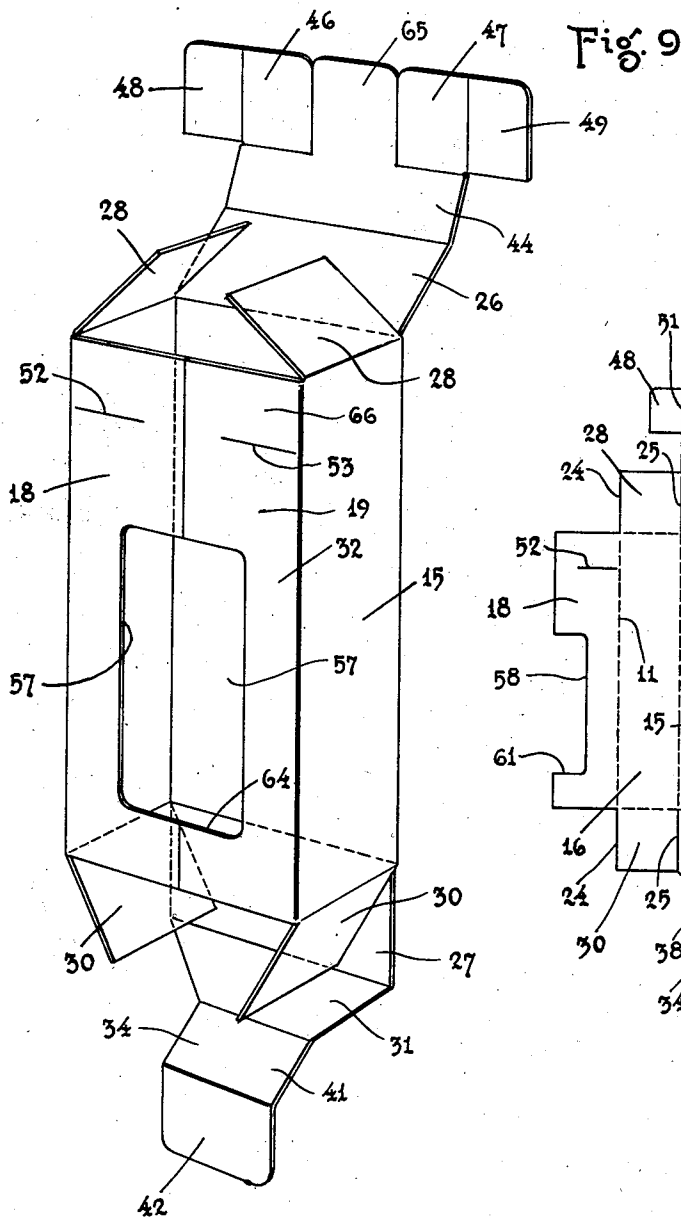
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4 Sheets-Sheet 4



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UNITED STATES PATENT OFFICE

2,114,422

BOX

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Application January 20, 1934, Serial No. 707,507

7 Claims. (Cl. 229—39)

My invention relates to boxes and has for its object to provide a box such that access to the interior of the box cannot be had except through breaking of a part of the box.

5 An object of the invention resides in constructing the box so that tampering with the contents of the box will be readily perceptible.

10 A still further object of the invention resides in constructing the box so that the part of the box broken to gain access to the interior can not be repaired without being readily perceptible.

15 A still further object of the invention resides in constructing the box so that the closure may be reclosed after the box has once been opened.

20 An object of the invention resides in constructing the box with a closure having locking means thereon adapted to extend into the interior of the box and to lock the box into closing position.

25 An object of the invention resides in constructing a box which has a closure having a flange overlying one of the walls of the box and in further providing tabs on the flange projecting into the interior of the box.

30 A still further object of the invention resides in constructing the tabs with keys extending into the interior of the box and locking the box in closed position.

35 A feature of the invention resides in constructing the box from paper, cardboard or some similar material and in folding over the key upon the tab for the purpose of inserting the same into the interior of the box.

40 An object of the invention resides in constructing the box with a slot of a width equal to the width of the folded-over tab and key structure through which the folded-over structure may be inserted into the interior of the box.

45 A still further object of the invention resides in constructing the box of a sufficiently resilient material so that the key moves away from the tab when received within the interior of the box and serves to lock the closure in closing position.

50 Another object of the invention resides in constructing the box with front wall sections and utilizing two tabs, said tabs holding the sections in proper relation with respect to one another.

55 Another object of the invention resides in constructing the closure for one end of the box with a tongue insertable into the interior of the box through one of the walls thereof, said tongue overlying said wall of the box and being held in such position through engagement with the article contained within the box.

A feature of the invention resides in constructing one wall of the box with a window

through which the contents of the box may be viewed and inserting said tongue into the interior of the box through said window.

An object of the invention resides in constructing the tongue with a part overlying the wall of the box through which the tongue extends and with another part overlying the bottom of the box, both of said parts being held in position through the article contained within the box.

Other objects of the invention reside in the novel combination and arrangement of parts and in the details of construction hereinafter illustrated and/or described.

In the drawings:

Fig. 1 is a perspective view of a box illustrating an embodiment of my invention.

Fig. 2 is a plan sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is an elevational sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a perspective view of the box with the bottom and the top closures open.

Fig. 5 is a developed view of the blank from which the box is constructed.

Figs. 6, 7, 8, 9, and 10 are views similar to 1—5 inclusive, illustrating a modification of the invention.

In the sale of alcoholic liquors and similar commodities in bottles or other containers, it frequently occurs that the receptacles are opened and the contents thereof cut or diluted or an inferior product substituted. The goods thus cut or diluted are resold under the trade name of the original manufacturer and fraud practiced upon the public. The present invention provides a box in which bottled goods may be sold and by means of which the purchaser is immediately notified in the event that the contents of the box have been tampered with.

My invention has been shown in Figs. 1—5 inclusive as constructed from a blank formed of paper, cardboard or some other similar material. This blank is scored along longitudinally extending lines, 11, 12, 13, and 14 to form a rear wall 15, side walls 16 and 17 and front wall sections 18 and 19. These various parts are adapted to be folded together as shown in Fig. 4 to form a box open at its ends. The wall section 18 is somewhat wider than the wall section 19 by means of which an overlap is provided which is indicated at 21. The two sections 18 and 19 are secured together through the overlap 21 by pasting, gluing or otherwise to provide a front wall 32. By means of this construction the box may be collapsed and erected when required. The blank A is further

scored along two transverse lines 22 and 23 and severed along lines 24 and 25 to form upper and lower end closures 26 and 27 and end members 28 and 30. The end closures 26 and 27 are hinged 5 along the score lines 22 and 23 to the rear wall 15. The end sections 28 are likewise hinged through the score lines 22 and 23 to the side walls, 16 and 17. When the box is properly folded the two end closures, 26 and 27 overlie the end members 28 and form closures for the two ends of the box. 10

The bottom closure 27 is constructed with a flap 31 which is adapted to overlie the outer surface of the front wall 32 of the box. This flap is hinged to the closure 27 through the score line 33. 15 Issuing outwardly from the flap 31 is a tongue 34 which is adapted to extend into the interior of the box through a slot 35 formed in the front wall 32 of the box. This slot is constructed by cutting notches 36 and 37 in the two front wall sections 18 and 19 at the marginal portions of the same which notches meet one another when the front wall sections are brought together.

The tongue 34 is scored at 38 and 39 to provide two parts 41 and 42 hingedly connected together and to the flap 31. The part 34 is adapted to overlie the inner surface of the front wall 32 of the carton while the part 34 is adapted to overlie the bottom closure of the carton. The relation of the parts when the bottom closure is in closing position is most clearly illustrated in Fig. 3. In this figure a bottle 43 is shown as disposed within the interior of the box proper. This bottle rests upon the part 32 of tongue 34 and is also closely disposed adjacent the part 41 of said tongue so that withdrawal of the tongue through the slot 35 for the purpose of gaining access to the interior of the box can not be accomplished. Through this construction the closure for the bottom of the box is held locked thereby preventing the opening of the box from the lower end thereof. 40

The upper end of the box is closed through the end members 28 and closure 26. These members are folded on the score line 22. The closure 26 45 has formed on it a flap 44 which is hingedly connected to the closure 26 through a score line 45. At the ends of the flap 44 are provided two tabs 46 and 47 which are spaced from one another and project outwardly from said flap in a longitudinal direction with respect to the rear wall of the box. These tabs have formed on them keys 48 and 49 which project laterally from the said tabs and which are hingedly connected thereto along score lines 51. The score lines 51 are preferably substantially in alignment with the lines of severance 25 for a purpose to be presently more fully described.

The two front wall sections 18 and 19 are constructed with slots 52 and 53 which extend 60 laterally thereof and commence at the score lines 11 and 14, said slots terminating short of the free edges of said front wall sections. The keys 48 and 49 are adapted to be folded along the score lines 51 to overlie the tabs 46 and 47. The said structures when so folded are of a width substantially equal to the length of the slots 52 and 53 and may be inserted into the interior of the box through said slots when so folded. The box is preferably constructed of paper cardboard or some 65 other suitable material which has sufficient resiliency so that the keys 48 and 49 tend to spring outwardly from the tabs 46 and 47 when the same are released. These keys as soon as the tabs 46 and 47 are completely within the interior of the box 70 are free to move toward the side walls 16 and 17

of the box as best shown in Fig. 2. When in this position the two tabs 46 and 47 overlie the inner surface of the front wall 32 of the box. With the parts so disposed the keys 48 and 49 cooperate with the slots 52 and 53 to lock the closure 26 in closing position. 5

It will be readily comprehended that access to the interior of the box may not be had except through the breaking of some part of the box which would be readily discernible by a prospective purchaser. To facilitate opening of the box the tabs 46 and 47, where the same are joined to the flap 44, are weakened as indicated at 54 and 55. This may be accomplished through notching the flap 45 as shown or by perforating 10 or otherwise weakening the structure along the line of joinder of the tabs to the flap. When it is desired to open the container the flap 44 is broken along the lines of weakening 54 and 55 and then the tabs 46 and 47 completely disconnected from said flaps. Closure 26 may then be opened in the customary manner and access to the interior of the box may be had through the open upper end thereof. After the flap 44 has been so freed from the tabs 46 and 47 said flap 25 may be used in the customary manner and inserted upon the interior of the front wall 32 when it is desired to reclose the box.

For the purpose of viewing the article contained within the interior of the box, a window 56 30 is provided which consists of an opening cut in the rear wall 15. This window is so disposed as to disclose the trade-mark of the article contained in the box and such other portions of the same as may be found desirable. The said window is however located sufficiently below the upper end of the box so that access to the two keys 48 and 49 may not be had through the window. 35

The use of the invention is as follows: The 40 boxes are formed in the factory with the folded sections glued together. To erect the box it is merely necessary to press the formed blank together along the outwardly folded edges of the same. The end members 30 may next be folded 45 inwardly and the closure 27 folded over to overlie said end members. Tongue 34 is next inserted into the interior of the box through the slot 35. When score line 38 reaches said slot the two parts 41 and 42 of tongue 34 are folded down along 50 the front wall 32 and against the bottom formed through the closure 27. The bottle 43 is next inserted into the box. The bottom of the bottle when in proper position engages the portions 41 and 42 of tongue 34 and holds the same from 55 removal. Through the action of the two portions specified the bottom closure is securely held in locking position and removal of the same can not be accomplished excepting by removal of the bottle from the box. End members 28 are next 60 folded inwardly. The two keys 48 and 49 are next bent along the score lines 51 to overlie the tabs 46 and 47. When so disposed the folded over tab and key structures may be inserted into the interior of the box through the two slots 52 65 and 53. Immediately upon complete entry of the keys 48 and 49 into the interior of the box, said keys spring outwardly through the resiliency of the material from which the box is constructed so that said keys lie along side walls 16 and 17 70 of the box. This locks the closure 26 in closing position and prevents tampering with the contents of the box. In order to open the box it is necessary to break some part of the box. To facilitate the same the flap 44 is weakened along 75

the lines of joinder of tabs 46 and 47 thereto. These parts will hence break along these lines of weakening when it is desired to open the box which leaves the flap 44 free to be used for reclosing purposes if desired.

For the purpose of advising the purchaser that the contents of the box have been tampered with, printed matter may be placed upon the folded wall 32 of the box at the locality designated by the reference numeral 66 which is normally covered by the flap 44. This printed matter may consist of any wording such as "if this printing appears, the contents of the box have been tampered with" or words to a similar or like effect. Inasmuch as no particular phraseology is involved, the exact wording has not been shown on the drawings, although it may be comprehended that same may be readily printed or otherwise formed in the space designated.

My invention is highly advantageous in that an extremely simple and practical construction is provided in which tampering with the contents of the box is entirely prevented.

In Figures 6-10 I have shown a modified form of the invention which requires no gluing or pasting. Inasmuch as the majority of the parts of this form of the invention are identical with those previously described corresponding parts will be indicated by the same reference characters and such parts will not be further described. In the form of the invention shown in Figures 6-10 the two front wall sections 18 and 19 are not glued together but are held in place through the two closures. For this purpose the window which is indicated by the reference characters 57 is cut in the front wall 32 instead of the rear wall 15. This window is formed by cutting away the marginal portions of the sections 18 and 19 as indicated at 58 and 59 in Figure 10. When the parts are folded together the window 57 is formed. Other details of the two boxes are identical.

In the erection of the box shown in Fig. 9 the procedure is identical with that previously described. The various walls of the box are folded into form along the score lines 11, 12, 13, and 14 with the marginal portion 21 of front wall section 18 underlying the front wall section 19. This brings the lower edges 61 and 62 of the cut away portions of 58 and 59 in alignment forming the lower edge 64 of the window. The flap 31 and the parts 41 and 42 of the tongue 34 are of such dimensions that the flap 31 overlies the part of the wall 32 below the lower edge 64 of the window 57. When the tongue 34 is folded inwardly the same is inserted into the interior of the box through the window 57 and the two parts 41 and 42 of the tongue are brought against the wall 32 and the bottom of the box. The bottle or other article to be contained in the box is next inserted into the box through the upper open end thereof. Closure 26 is next applied which is accomplished through doubling back the keys 48 and 49 upon the tabs 46 and 47 and in inserting the same into the interior of the box through the slots 52 and 53. When the keys 48 and 49 lie within the box said keys move away from the tabs 46 and 47 in a manner to lock the box in closing position. In addition the two tabs 46 and 47 engage the edges of the slots 52 and 53 and hold the two wall sections 18 and 19 together so that the seam of the box can not be opened up to gain access into the interior of the box. Through the action of the various end members 28 and 30 which are of substantially

the same width as the width of the box, and through the edge 64 of the box at window 57 opening of the box is further prevented.

In the form of the invention shown in Fig. 9 an extension 65 is formed on the flap 26 between the two tabs 46 and 47. This extension is adapted to overlie the joint between the two sections 18 and 19 of the front wall 32 of the box and serves to protect the same and to assist in preventing tampering with the box at such locality. The box may be constructed either in glued or unglued form and is constructed from a single blank thereby simplifying the construction and assembly of the box. The box can be constructed with a window through which the contents of the box may be viewed when desired. Both the bottom and top closures are locked in position so that opening of the box can not be procured except through the destruction of some part thereof. My invention can be constructed by standard box making machinery and can be constructed at a nominal cost. Assembly and erection of the box is easily and readily accomplished without necessity of expensive and complicated machinery. The box is neat and attractive in appearance and greatly enhances the value of the article contained within the same.

Changes in the specification form of my invention as herein disclosed may be made within the scope of what is claimed without departing from the spirit of my invention.

Having described my invention what I claim as new and desire to protect by Letters Patent is:—

1. In a box formed with walls and having an opening, a closure for said opening, a tab formed on said closure and extending through one of said walls, said tab having a key thereon disposed within the interior of the box and preventing opening of the box, said tab being cut at the locality of attachment to the same to reduce the cross-sectional area at such locality and to weaken the same to facilitate separation of the tab from the closure in the opening of the box.

2. In a box formed with walls and having an opening, a closure for said opening, a tab formed on said closure and extending through one of said walls, said tab having a key thereon disposed within the interior of the box and preventing opening of the box, said tab being notched at the locality of attachment to the same to weaken said structure for the purpose of facilitating separation of the tab from the closure in the opening of the box.

3. In a box comprising a rear wall, side walls connected to said rear wall, front wall sections connected to said side walls and adapted to overlie one another to form a front wall for the box, said front wall sections having slots therein disposed near the corners between the front wall sections and side walls of the box and spaced from one another, a closure for one end of the box connected to the rear wall section, said closure having a flap overlying the front wall sections and having spaced tabs extending through said slots for holding the wall sections in proper position, and an extension on said flap disposed between said tabs, said extension overlying the front wall of the box upon the exterior thereof.

4. In a box formed with walls having an opening, a closure for said opening, a flap formed on said closure and overlying one of the walls of the box, on the exterior thereof, said wall having spaced slots at the lateral edges thereof, spaced tabs formed on said flap and extending through

said slots, and keys on said tabs bent outwardly therefrom along lines parallel to the lateral edges of the flap, said keys lying along the inner surfaces of the walls adjoining the wall through which the tabs extend.

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5. A non-reclosing box for use with a bottle having a body and a neck, said box comprising a rear wall, side walls connected to said rear wall, front wall sections connected to said side walls and adapted to overlie one another to form a front wall for the box, said front wall sections having slots therein near the upper portions thereof and opposite the neck of the bottle and openings therein opposite the body of the bottle, a closure for the bottom of the box, hinged to the rear wall, a flap on said closure overlying the front wall, a tongue on said flap foldable inwardly into the interior of the box through said openings and overlying the front wall of the box upon the interior thereof, said tongue being sandwiched in between the front wall and body of the bottle and held in position thereby, a closure for the upper end of the box, hinged to the rear wall, a flap formed on said closure and overlying the front wall of the box, tabs on said flap extending through said slots and into the space within the box between the walls of the box and the neck of the bottle and keys hinged to said tabs and adapted to be folded back upon said tabs and to be inserted jointly therewith through said slots and into the box, said keys being of a length less than the distance between the side walls of the box and the neck of the bottle and being adapted to swing outwardly from the tabs and to clear said

neck throughout such movement, said keys serving to hold the parts of the box locked together.

6. In a box formed with walls having an opening, a closure for said opening, a flap formed on said closure and overlying one of the walls of the box on the exterior thereof, said wall having spaced slots extending toward the lateral edges thereof, spaced tabs formed on said flap and extending through said slots, and keys on said tabs extending angularly from said tabs and lying along the inner surfaces of the walls adjoining the wall through which the tabs extend.

7. A non-reclosing box for use with a bottle having a body and a neck, said box comprising side walls, a front wall and a rear wall and top and bottom closures hingedly connected to certain of said walls, one of said walls having an opening at the lower end of the same, a tongue connected to the bottom closure and extending into the box through said opening and adapted to lie adjacent said wall and between it and the bottle and held from withdrawal from said opening by the body of the bottle, one of said walls having a slot in the upper portion thereof, a tab connected to the top closure and a key hinged thereto and adapted to overlie said tab, said key being insertable jointly with said tab through one of the walls of the box and into the space between said wall of the box and the neck of the bottle and swingable within the box into locking position, said key being of such dimensions as to clear the neck in the movement thereof to effect the locking of the box without obstruction.

REYNOLDS GUYER.