Nov. 1, 1960 W. F. O'GORMAN 2,958,418

CIGARETTE PACKAGE

Filed Sept. 20, 1957 4 Sheets-Sheet 1

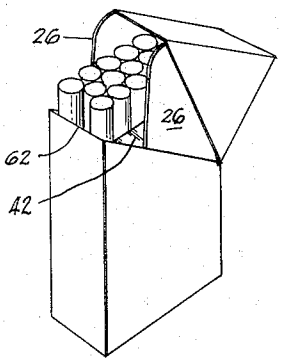


Fig. 1.

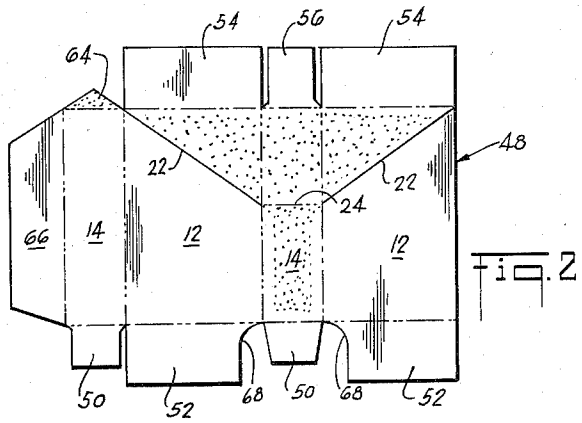


Fig. 2

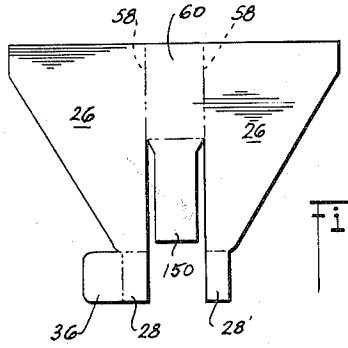


Fig. 3.

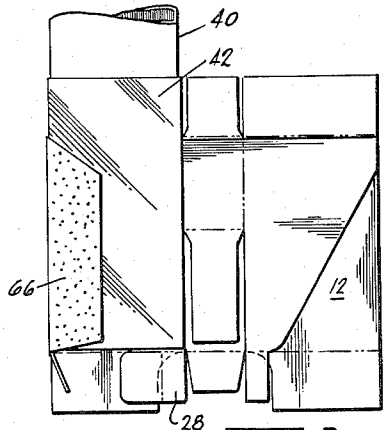


Fig. 5.

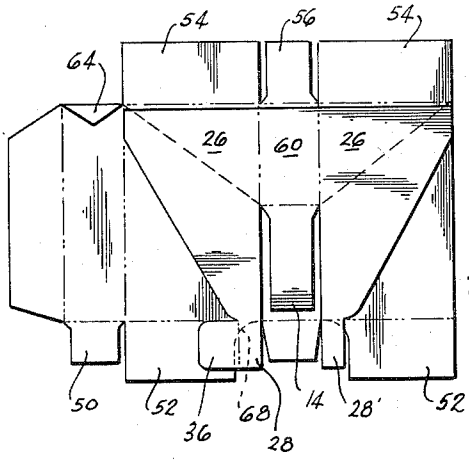


Fig. 4.

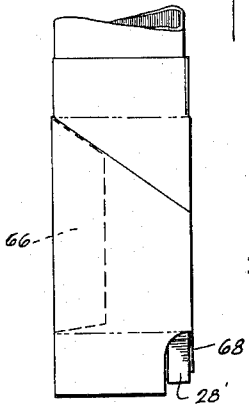


Fig. 6.

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CIGARETTE PACKAGE

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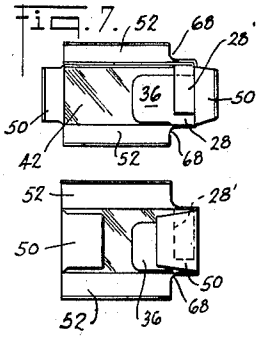


Fig. 7.

Fig. 8.

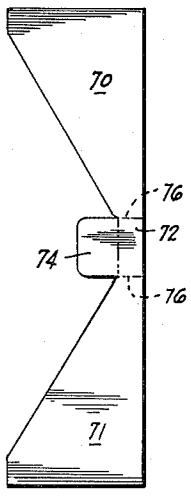


Fig. 10.

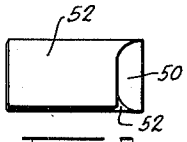


Fig. 9.

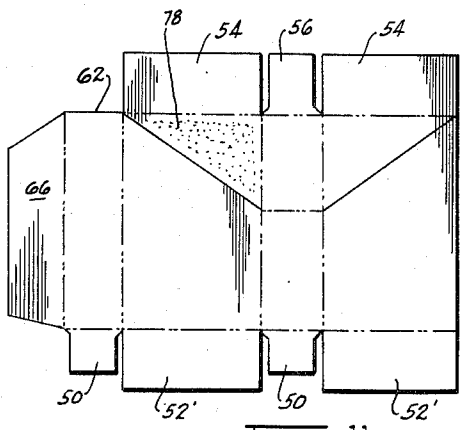


Fig. 11.

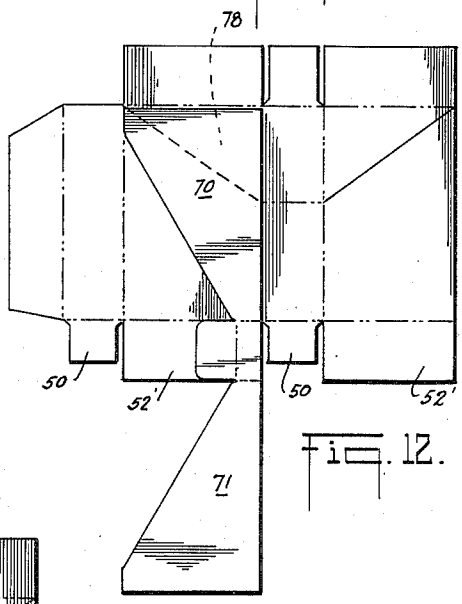


Fig. 12.

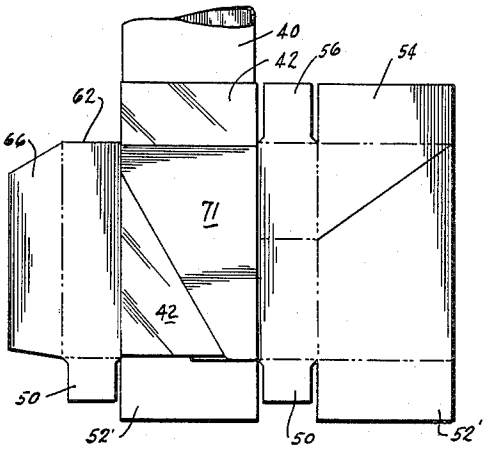


Fig. 13.

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CIGARETTE PACKAGE

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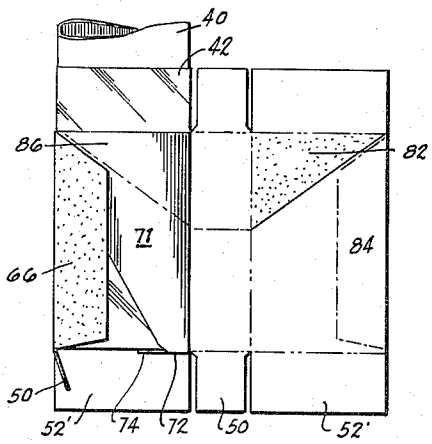


Fig. 14.

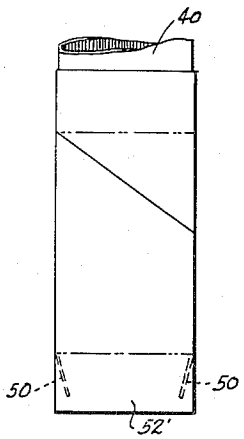


Fig. 15.

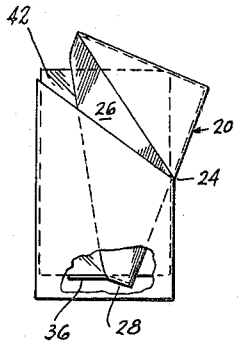


Fig. 16.

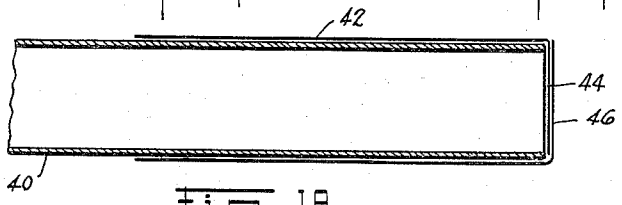


Fig. 18.

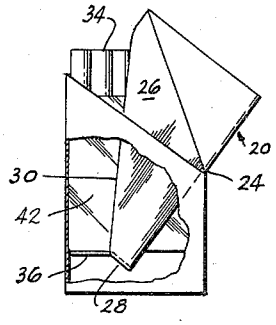


Fig. 17.

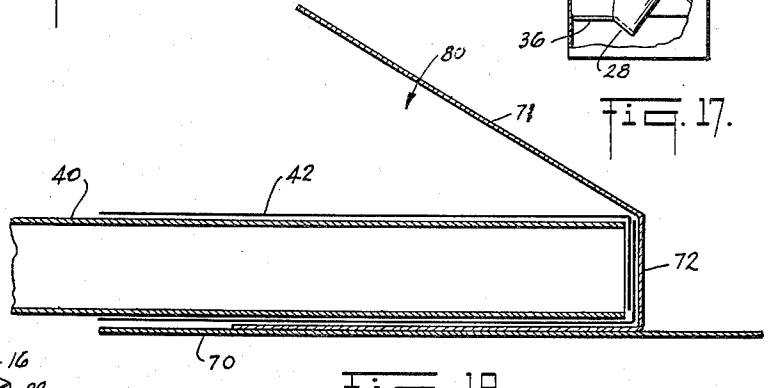


Fig. 19.

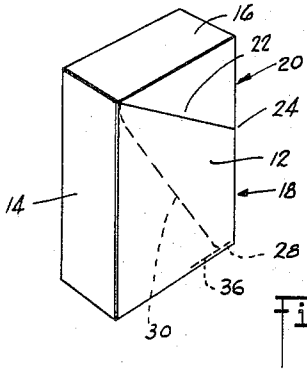


Fig. 20.

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CIGARETTE PACKAGE

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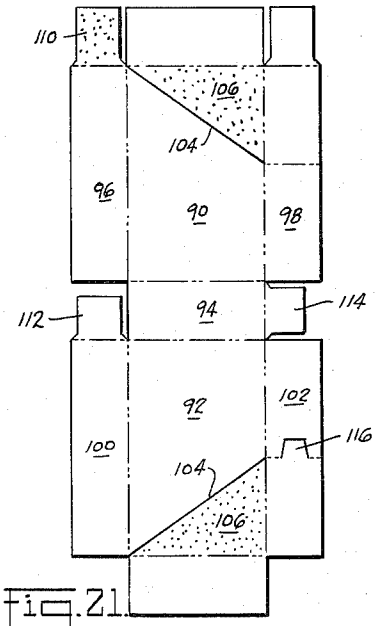


Fig. 21.

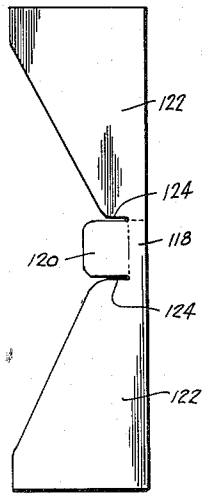


Fig. 22.

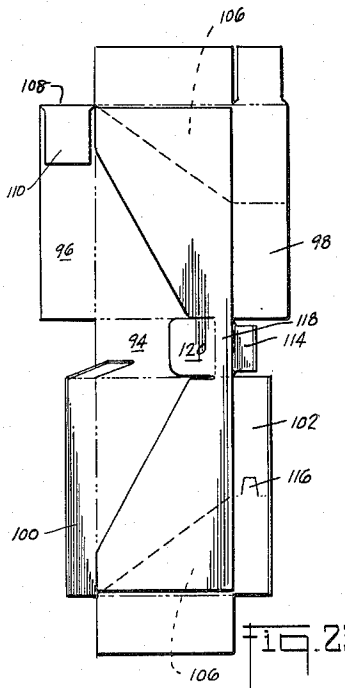


Fig. 23.

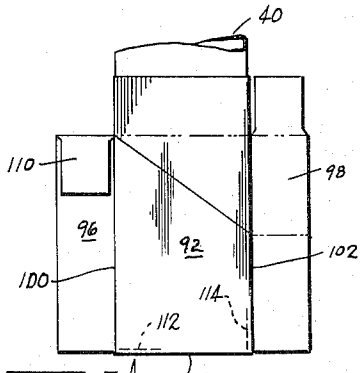


Fig. 24.

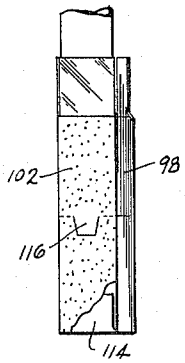


Fig. 25.

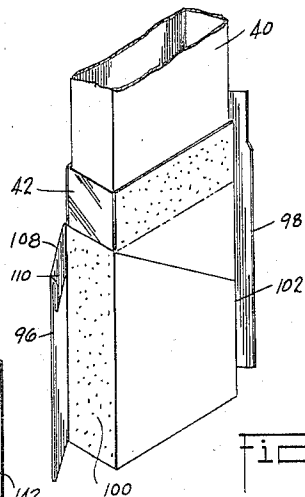


Fig. 26.

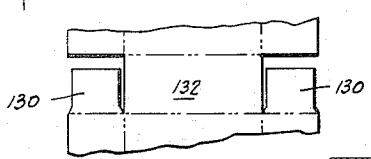


Fig. 27.

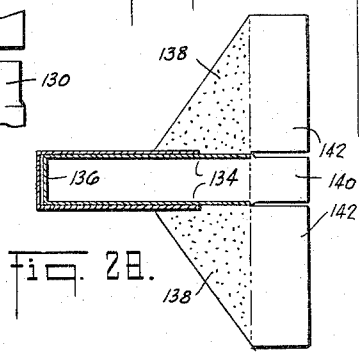


Fig. 28.

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United States Patent Office 2,958,418
Patented Nov. 1, 1960

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CIGARETTE PACKAGE

William F. O'Gorman, New York, N.Y., assignor to Garrett Container Corporation, New York, N.Y., a corporation of New York

Filed Sept. 20, 1957, Ser. No. 685,342

11 Claims. (Cl. 206—41.2)

This invention relates to cigarette packages, and more particularly to an expendible dispensing container for cigarettes.

An inexpensive, expendible crush-resistant box for cigarettes has come into vogue. This box is made of stiff paper, and is sometimes referred to as a "flip top" box. The primary object of the present invention is to generally improve such boxes for cigarettes.

A more specific object is to provide an expendible box made of paper which will "dispense" the cigarettes as the tiltable cap of the box is opened, that is, it lifts the cigarettes to make them more readily accessible. Another object is to devise such a box which can be manipulated in one hand. A further object is to provide a dispensing box which may be made without significant increase in cost. Still further objects are to provide the improved box in variant forms adapted to be made on different types of already existing packaging machines.

To accomplish the foregoing general objects, and other more specific objects which will hereinafter appear, my invention resides in the dispensing container elements and their relation one to another, as are hereinafter more particularly described in the following specification. The specification is accompanied by drawings in which:

Fig. 1 is a perspective view showing the box open;

Fig. 2 is a development or blank used for the body and cap of the box;

Fig. 3 is a development or blank used for the stirrup which lifts the cigarettes;

Fig. 4 shows the blanks of Figs. 2 and 3 assembled;

Fig. 5 shows the assembled blank partially wrapped around a previously foil-wrapped mandrel to form an open-ended box;

Fig. 6 illustrates a further step in wrapping the blank around the mandrel;

Fig. 7 illustrates the lapping of the cross strap of the stirrup;

Figs. 8 and 9 illustrate the inward folding of tabs and flaps to close the bottom of the box;

Fig. 10 shows a modified stirrup blank;

Fig. 11 shows a slightly modified main blank;

Fig. 12 shows an assembly of the main and stirrup blanks of Figs. 11 and 10;

Fig. 13 illustrates the folding of the stirrup blank around the end of a foil-wrapped mandrel;

Fig. 14 shows the folding of the main blank around the previously folded stirrup blank and the mandrel;

Fig. 15 illustrates completion of the wrapping of the main blank around the mandrel to form an open-ended box;

Fig. 16 is explanatory of the initial partial opening of the cap of the box to expose the foil wrapped bundle of cigarettes;

Fig. 17 illustrates the cap fully opened, with a part of the foil liner removed;

Fig. 18 is a longitudinal section through the mandrel to show the preliminary wrapping of the foil liner thereon;

Fig. 19 is explanatory of the folding of a blank at the bottom of the box and around the mandrel;

Fig. 20 is a perspective view showing the cigarette package in closed position;

Fig. 21 illustrates a modified form of the main blank;

Fig. 22 shows a slightly modified stirrup blank;

Fig. 23 shows the assembly of the main and stirrup blanks;

Fig. 24 is explanatory of the folding of the assembled blank around a preliminarily foil wrapped mandrel;

Fig. 25 is an edge view explanatory of the lapping of the longitudinal edges of the box;

Fig. 26 is a perspective view also showing the lapping of the longitudinal edges of the box;

Fig. 27 is a fragmentary view of the middle portion of the blank shown in Fig. 21, but showing a modification; and

Fig. 28 is a longitudinal section explanatory of one method of assembly of the modification.

Referring to the drawing, and more particularly to Fig. 20, the cigarette box there shown has face walls one of which is marked **12**, edge walls one of which is marked **14**, and end walls one of which is marked **16**. The box is divided into a body **18** and a cap **20**, the separation of the cap from the body being defined by two parallel sloping lines, the visible one of which is marked **22**. These lines lead to a hinge bend at **24** which runs across the edge wall. Thus, the cap tilts open about the hinge line **24**, as shown in Figs. 16 and 17.

The container further comprises what may be termed a "stirrup." This is made up of side walls marked **26** in Figs. 16 and 17. The side walls **26** are joined by a cross strap **28**. The upper ends of the side walls **26** are secured inside the tiltable cap **20** for movement therewith, and the resulting movement will be seen by comparison of Figs. 20, 16 and 17. The side walls **26** serve to guide the cap during its tilting movement, and to align it flush with the body **18** when the container is closed. They also help stiffen the box. They are appropriately shaped to permit the desired tilting of the cap and stirrup. More specifically, the side walls are cut away in a direction from top to bottom, or are generally triangular in configuration, as is perhaps best shown by the dotted line **30** in Fig. 20.

From inspection of Figs. 1, 16, and 17, it will be seen that as the cap **20** is tilted, the stirrup **28** rises, thus lifting the cigarettes. The bundle of cigarettes is preferably wrapped in a liner, typically a thin foil liner, indicated at **42** in Figs. 16 and 17. When a fresh pack of cigarettes is first opened, the foil-wrapped body of cigarettes is raised, as shown in Fig. 16, and the top portion of the foil liner may be torn away, thus exposing the cigarettes, as shown at **34** in Fig. 17. To facilitate this operation, the foil liner either may be scored peripherally so that the upper portion is readily lifted, or, as is now done in some cigarette packages, the foil liner may consist of two parts, the larger part enclosing most of the length of the cigarettes, and the smaller part enclosing only the top portion of the cigarettes, the latter or small upper part being removed when the package is first opened.

Because of the liner **42** remaining around the cigarettes, the latter are raised bodily by the cross strap **28** of the stirrup. Additional bearing surface may be provided by a "lift stop" **36** which projects forward from the cross strap **28**. During tilting of the cap **20**, the lift-stop **36** helps lift the cigarettes, and later acts as a motion limiting stop when its forward edge engages the wall of the box, as shown in Fig. 17.

Several known types of cigarette packaging machines employ a turret carrying a suitable number, say twelve, radial mandrels. Each is a hollow open-ended thin walled

tube having a rectangular cross section corresponding to that of the cigarette package. The package is formed about the outer end of the mandrel, and a bundle of cigarettes is subsequently fed through the mandrel into the package. On removal of the filled package from the mandrel, the only remaining step is to close the open end of the package.

Referring now to Fig. 18, a longitudinal section through the mandrel is shown at 40. A liner (typically foil) is preliminarily wrapped about the mandrel. This is indicated at 42, with overlapping ends shown at 44 and 46.

Referring now to Fig. 2, the box is made of a single blank, generally designed 48. This is made of heavy paper which may be similar to that now used in current crush-resistant "flip top" boxes. The blank is preliminarily punched and scored in appropriate machinery, which may be associated with preceding printing presses to color and print the same. The inner face walls are shown at 12, and the edge walls at 14. The bottom is subsequently formed by tabs 50 and flaps 52. The top is subsequently formed by flaps 54 and tab 56. The severance at 22 separates the body from the cap, and the hinge line is indicated at 24.

The stirrup is formed from a single blank shown in Fig. 3. This comprises the sides 26 having fold lines 58 which provides an edge wall 60 therebetween. There are extensions 28 and 28' at the bottom ends of the side walls 26, and an additional portion 36 which acts as the lift-stop previously referred to.

Referring now to Fig. 4, the stirrup blank is preliminarily secured to the main blank. For this purpose, glue or other suitable adhesive or cement may be applied on the somewhat T-shaped stippled area shown in Fig. 2. The stirrup blank is placed over the main blank and adhered thereto as shown in Fig. 4. Thus, the sides 26 of the stirrup blank are secured to the inner face walls of the cap, and the edge wall 60 of the stirrup blank is secured to the edge wall 14 of the box blank.

Referring to Fig. 1, the edge 62 of the box may be referred to as the "lip." If it be desired to have a folded lip at this point, the main blank may be provided with a projection, indicated at 64 in Fig. 2. This may be coated with adhesive and folded down flat against the edge wall 14 of the blank, as shown at 64 in Fig. 4. Such a folded lip is preferably provided before wrapping the assembled blank around the mandrel.

The main packaging machine, in one form, may be supplied with a stack or magazine of main blanks and another stack or magazine of stirrup blanks, these being glued and assembled as shown in Fig. 4 before being fed to the mandrel. In another form, the gluing and assembly of the blanks may be performed elsewhere, and the main packaging machine may have a single stack or magazine of assembled blanks of the type shown in Fig. 4.

In either case, at appropriate stations, the mandrel is first wrapped with a thin liner, usually foil, as shown in Fig. 18. The assembled blank is next folded around the wrapped mandrel. In Fig. 5 the mandrel 40 with its foil wrapping 42 has been brought into engagement with the blank (either by raising the blank to the mandrel, or vice versa), and the blank has been partially folded around the mandrel, including a longitudinal lap at 66. This is coated with an appropriate cement or glue, and the remainder of the blank is then folded around the mandrel until the inner face wall 12 is pressed against and secured to the lap 66, as shown in Fig. 6. At this time, the box is still open at both ends.

Referring now to Fig. 7 of the drawing, the cross straps 28 and 28' are folded inwardly over one another and are secured together. In the form here shown the strap 28' is folded over the strap 28, and it will be understood that adhesive is applied to either the outer face of strap 28, or the inner face of strap 28', to secure the straps together.

To facilitate this operation in automatic machinery, the end flaps 52 may, if desired, be cut away as shown at 68. This clearance is also shown in Figs. 2, 4 and 6 of the drawing, and is substantially smaller than the area of the tabs 50. In Fig. 7, the tabs 50 and flaps 52 are shown spread outward slightly, for clarity of illustration, but it will be understood that they may be and usually are in alignment with the walls of the box.

The next step is to close the bottom of the box, which is done by turning the tabs and flaps inward. In Fig. 8, the tabs 50 have been turned inward while the flaps 52 are still open. The flaps are next turned inward one over the other, and cement is preliminarily applied to either the outer surface of the inner flap, or the inner surface of the outer flap, whichever may be more convenient in the particular packaging apparatus used. The resulting closed end is shown in Fig. 9.

In accordance with conventional practice, a suitable bundle of cigarettes, say twenty, is next fed through the hollow mandrel to the closed end of the package, and a continued push slides the resulting loaded package from the mandrel. All that is needed then is to close the top of the package, which is done by first folding the foil liner over the top of the cigarettes, following which the top of the box is closed by inward folding of its flaps and tab.

Referring to Fig. 4, it will be understood that the tab 56 is turned inward first, followed by the flaps 54, and here again cement is applied to the outer surface of the inner flap, or in the alternative, to the inner surface of the outer flap. The cigarette package is then complete, as shown in Fig. 20.

Subsequently, in the hands of the consumer, the cap 20 may be tilted back as shown in Figs. 16 and 17, and the upper portion of the liner removed, thereby exposing the ends of the raised cigarettes, as shown in Fig. 17. One advantage of the package is that it may be handled and opened in one hand, and for this purpose, the package may be grasped in the right hand in the position shown in Fig. 20, with the thumb on top of the pack near the right or hinged edge. By moving one's thumb frictionally toward the right and downward, the cap is opened, thus serving up the cigarettes as shown in Fig. 17.

A modified form of dispensing container may be described with reference to Figs. 11–15 of the drawing. The main blank for the outer box is shown in Fig. 11, and is substantially the same as previously described, with minor differences mentioned later. The principal change in this box is in the stirrup blank, which is shown in Fig. 10. In this case, the blank has side walls 70 and 71 joined end to end by a cross strap 72. The lift-stop 74 projects from the cross strap 72. It will be evident that in this case the stirrup is completed by folding the blank at the bottom of the container, on fold lines 76 located between the cross strap 72 and the sides 70.

Referring now to the main blank shown in Fig. 11, this again is intended to be folded about the longitudinal edges of the box, and is longitudinally lapped at 66. As before, the top is formed of flaps 54 and tab 56. Similarly, the bottom is formed of tabs 50 and flaps 52', but the flaps 52' may be of full area, that is, there is no need to cut away a part of the flaps as was shown at 68 in Fig. 2. This is so because there is no operation corresponding to the folding and cementing together of two cross straps (28 and 28' in Fig. 7).

Another minor difference in the main blank shown in Fig. 11 is that the refinement of a folded over lip has been omitted at 62. In other words, the triangular piece shown at 64 in Figs. 2 and 4 is here omitted, but it will be understood that if desired, the folded lip may be used in Fig. 11, and conversely, may be omitted in Fig. 2. Also the folded lip, if used, may be differently shaped, as shown at 110 in Figs. 21 and 23, for example.

Adhesive is applied on the main blank at the area 78 in Fig. 11, whereupon the stirrup blank is added, as shown in Fig. 12, with the parts secured together at 78. The resulting assembled blank is next fed to the mandrel,

which of course is preliminarily foil-wrapped to provide a liner, as was described in connection with Fig. 18.

Referring to Fig. 13, the mandrel is shown at 40, with its foil wrap 42, and the mandrel either is pressed down on a face wall of the blank, or the blank is moved up to the mandrel, following which the free side 71 of the stirrup blank is folded around the outer end of the mandrel. This is shown by the change from the position 71 in Fig. 12 to the position 71 in Fig. 13. Fig. 19 resembles Fig. 18 in showing a longitudinal upright section through the mandrel 40 with its liner wrap 42, but adds the stirrup with its sides 70, 71, and cross strap 72, these being folded around the outer end of the mandrel as indicated by the arrow 80.

The main blank is next folded about the longitudinal edges of the mandrel, as is illustrated by Figs. 13, 14, and 15 considered sequentailly. In Fig. 14, one edge wall and the lap 66 have been wrapped around the mandrel 40. Appropriate adhesive is applied on the lap 66, and on the area 82 of the inner face wall of the cap, following which the other edge and face walls are wrapped around the mandrel as shown in Fig. 15. It will be understood that adhesive may be applied inside the face wall in the area 84 of Fig. 14 instead of on the outside of the lap 66, and conversely, adhesive may be applied on the outside of the stirrup in the area 86 instead of on the inside of the cap as shown at 82, all depending on convenience in the operation of the packaging machine. The areas 84 and 86 are outlined in broken lines.

The bottom of the box is next closed by turning the tabs 50 inward, and then the flaps 52'. As before, adhesive may be applied on the outside of the inner flap, or on the inside of the outer flap, thus securing the flaps in closed relation. Again, as previously described, a bundle of cigarettes is pushed through the hollow mandrel and the hollow package, and the loaded package is removed from the mandrel. The top is then closed by folding the liner and then the tab and flaps of the cap. Here again, the flaps are secured by adhesive on the outside of one or on the inside of the other, whereupon the package assumes the completed form shown in Fig. 20.

The operation is exactly the same as previously described, and referring to Figs. 16 and 17, by substituting the numerals 72 and 74 for the strap 28 and lift-stop 36, respectively, the previous description would apply.

As so far described, the main or box blank has been folded about the longitudinal edges of the mandrel. One type of packaging machine functions in this way, but in another type of machine the box blank is initially folded at the bottom of the box. A modified form of the invention intended for use in such apparatus is illustrated in Figs. 21–26 of the drawing. The main blank is shown in Fig. 21, and the stirrup blank is shown in Fig. 22. The latter may be identical with that previously described, but optionally differs slightly in a way discussed later.

Reverting to Fig. 21, the blank comprises face walls 90 and 92 connected by a bottom wall 94. Face wall 90 has edge walls 96 and 98, and face wall 92 has edge walls 100 and 102. The cap is defined from the body of the box by the diagonal cut lines 104. Adhesive is applied on the inside of the face walls of the cap, as shown by the stippling at 106. The stirrup blank is then assembled with the main blank as shown in Fig. 23, the two being held together at the areas 106. If the lip 108 (Figs. 23 and 26) is to be reversely folded, a suitable tab 110 (Fig. 21) may be provided; coated with adhesive; and folded to the position shown in Fig. 23. With the present construction, there is a double thickness at the lip because of the two lapped edge walls 96 and 100, and there is little need for the reversely folded tab 110, which may of course be omitted.

Referring now to Fig. 24, the assembled blank is folded about the outer end of the liner wrapped mandrel 40. The folding is about the bottom of the box, that is, the fold lines define the integral bottom 94 shown in Figs. 21 and 23. Differently described, the direction of the fold of the assembled blank is the same as that previously used for the stirrup 70, 71 in Fig. 19, that is, in the direction of the arrow 80.

Reverting now to Fig. 24, the side edges of the box are next formed by lapping the double side edges at both edges of the mandrel. In Fig. 24, it is assumed that the edges 100 and 102 have already been folded downward, but that the edges 96 and 98 have not yet been turned upward. Similar remark applies to Fig. 25, in which the edge 102 has been turned about the mandrel, but the edge 98 has not yet been folded over the edge 102, and indeed, is shown somewhat in opposite direction, for clarity of illustration. The sequential folding of the lapped side edges is also indicated in Fig. 26, in which the edges 100 and 102 have already been wrapped about the mandrel 40, and the edges 96 and 98 are being folded thereagainst.

Reverting to Fig. 21, tabs 112 and 114 are provided for the bottom corners of the box. Fig. 25 shows how tab 114 is turned in before the edges 102 and 98. The latter are secured together by adhesive applied on either the outside of the inner edge 102 or on the inside of the outer edge 98. Fig. 24 shows by way of contrast how the tab 112 is turned inward over the bottom wall 94. It will be understood that the tab 112 could be like tab 114, that is, in the blank it could project directly from the bottom 94, as shown at 114 in Fig. 21, in which case it later would be disposed in the same position as the tab 114 shown in Fig. 25. However, it is preferred to have tab 112 overlie the bottom 94 as here illustrated, because the side edges are already of double thickness in this form of box, while the bottom has only a single thickness. Despite the latter consideration, the tab 114 is not made like the tab 112 because it would not do to have it overlie the stirrup, and it is also not desirable to have it underlie the bottom wall 94 of the package where it would be exposed and visible.

Referring to Fig. 21, the edge wall 102 may be provided with a short stubby finger at 116, defined on three sides by incisions cut through the material. Adhesive is omitted, as shown in Fig. 25. Thus, the finger is integral with the cap. The edge wall 102 is the inner of the two edge walls. The result of this construction is that when the cap is tilted open, the finger 116 moves inward and tends to nudge the bundle of cigarettes inward. This helps keep them in vertical alignment as they are being lifted by the stirrup. This construction may be applied to the forms of package previously described, but is in the nature of a refinement detail which is not at all essential to successful operation of the container. For example, in Fig. 2, by omitting adhesive at the area 14, the depending tongue 150 (Fig. 3), preferably greatly shortened, may similarly be used to nudge the cigarettes when tilting the cap of the package.

In Fig. 22, the stirrup differs from that previously described in several minor respects. The cross strap 118 is narrower than previously shown, adding more area to the lift-stop 120. At the same time, the sides 122 have been widened, and to accommodate the extra width there are incisions at 124. The stirrup design shown in Fig. 22 may be used in the packages previously described, being substituted, for example, for the blank shown in Fig. 10, and conversely the blank shown in Fig. 10 may be used in the present package. I consider that shown in Fig. 22 to be preferable.

In respect to Figs. 21, 22 and 23, it may be mentioned that adhesive may be applied at one of the areas 106 instead of both, typically the upper area 106 when first assembling the stirrup and box blanks as shown in Fig. 23. This requires the subsequent application of adhesive to later secure the other side of the stirrup to the other side of the cap. The latter procedure may be preferred by some in order to leave the blanks free of one another when folding them about the end of the mandrel. However, when the material is not thick, it accommodates simultaneous folding of the combined blank.

In the description so far, it has been assumed that the package is formed about the same mandrel through which the cagarettes are loaded. Such is not necessarily the case, and additional freedom of design ensues if the package is assembled in some other fashion. For example, referring to Fig. 27, this shows the middle portion of a blank like that shown in Fig. 21, except that tabs **130** are both formed like the tab **112** in Fig. 21. They will both overlie the bottom wall **132** when the blank is assembled. In this case, it is assumed that the stirrup later is slid longitudinally into the open end of the box, and referring now to Fig. 28, the stirrup comprises sides **134** and a cross strap **136**. After sliding the stirrup into the box, the triangular face walls **138** of the cap may be cemented to the stirrup. In Fig. 28, the walls **138** have not yet been folded down into position against the stirrup sides **134**. Thereafter, a liner (foil) wrapped bundle of cigarettes is slid through the open end of the package, and the top is then closed by inward folding of tab **140** and flaps **142**.

It is believed that the construction and method of assembly and filling of my improved dispensing container, as well as the advantages thereof, will be apparent from the foregoing detailed description. It will also be understood that while I have shown and described my invention in several preferred forms, chanegs may be made in the structure shown, without departing from the scope of the invention, as sought to be defined in the following claims. In the claims, the term "cigarette" is intended to include equivalent tobacco products such as miniature cigars. Also, while metal foil is a common liner in cigarette packages, other liners such as plastics films, might be used. Even more important, for the dispensing function it is primarily the bottom wall of the liner which is significant in receiving the upward thrust of the stirrup, and from that viewpoint, the liner might be reduced to the lower part only of the cigarettes, and in minimum form might be any supporting material which is coextensive in area with the bottom of the container, and which is disposed between the stirrup and the bottom ends of the cigarettes. In the claims, the term "liner" therefore refers more particularly to the bottom liner.

I claim:

1. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the cigarettes at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the stirrup rising relative to the bottom during tilting of the cap, said stirrup being formed of a single blank folded on two fold lines extending longitudinally of the box to provide an edge wall and two side walls, the edge wall of the stirrup being secured inside the edge wall of the cap and the side walls of the stirrup being secured inside the face walls of the cap, said stirrup blank having extensions at the bottom ends of the side walls which extensions are secured in overlapping relation to form the cross strap of the stirrup.

2. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap rising relative to the bottom and bearing upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said stirrup being formed of a single blank folded on two fold lines extending longitudinally of the box to provide an edge wall and two side walls, the edge wall of the stirrup being secured inside the edge wall of the cap and the side walls of the stirrup being secured inside the face walls of the cap, and said stirrup blank having extensions at the bottom ends of the side walls which extensions are secured in overlapping relation to form the cross strap and the liftstop of the stirrup.

3. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the cigarettes at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the stirrup rising relative to the bottom during tilting of the cap, said stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said blank being folded at the bottom of the container between the cross strap and the side walls.

4. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the titlable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap rising relative to the bottom and bearing upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said blank being folded at the bottom of the container between the cross strap and the side walls.

5. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top,

said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the cigarettes at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the stirrup rising relative to the bottom during tilting of the cap, said paper box being made of a single blank folded about the longitudinal edges of the box and longitudinally lapped, the bottom and top of the box being formed of inwardly folded tabs and flaps, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said stirrup blank being folded at the bottom of the container between the cross strap and the side walls.

6. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap rising relative to the bottom and bearing upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said paper box being made of a single blank folded about the longitudinal edges of the box and longitudinally lapped, the bottom and top of the box being formed of inwardly folded tabs and flaps, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said stirrup blank being folded at the bottom of the container between the cross strap and the side walls.

7. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a foil liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading from one corner to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap having a lift-stop beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap and lift-stop rising relative to the bottom and bearing upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said paper box being made of a single blank folded about the longitudinal edges of the box and longitudinally lapped, the bottom and top of the box being formed of inwardly folded tabs and flaps, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said stirrup blank being folded at the bottom of the container between the cross strap and the side walls.

8. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the cigarettes at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the stirrup rising relative to the bottom during tilting of the cap, said paper box being made of a single blank folded about the bottom of the box, both of the side edges of the box being formed of inwardly folded laps extending longitudinally of the box, the top of the box being formed of inwardly folded flaps and a tab, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said blank being folded at the bottom of the container between the cross strap and the side walls.

9. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap rising relative to the bottom and bearing upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said paper box being made of a single blank folded about the bottom of the box, both of the side edges of the box being formed of inwardly folded laps extending longitudinally of the box, the top of the box being formed of inwardly folded flaps and a tab, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, said blank being folded at the bottom of the container between the cross strap and the side walls, and the bottom of the box being reinforced by tabs so located and secured as not to interfere with the desired movement of the stirrup.

10. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a foil liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading from one corner to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap having a lift-stop beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap and lift-stop rising relative to the bottom and bearing

upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said paper box being made of a single blank folded about the bottom of the box, both of the side edges of the box being formed of inwardly folded laps extending longitudinally of the box, the top of the box being formed of inwardly folded flaps and a tab, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, and said blank being folded at the bottom of the container between the cross strap and the side walls.

11. An expendible dispensing container for cigarettes or like elongated slender parallel articles, said container comprising a foil liner adjacent the cigarettes, a paper box having face, edge, and end walls, one end wall acting as a bottom beneath the lower ends of the cigarettes and the other end wall acting as a top, said box being divided into a body which includes the bottom and a tiltable cap which includes the top, the cap being defined by sloping lines on the face walls leading from one corner to a hinge bend on an edge wall, and a stirrup comprising side walls joined at the bottom by a cross strap having a lift-stop beneath the liner at the bottom of the container, the upper ends of said side walls being secured inside the face walls of the tiltable cap for movement therewith, the said side walls serving to guide and

to align the cap and body, and being shaped to permit the desired tilting of the cap and stirrup, the cross strap and lift-stop rising relative to the bottom and bearing upwardly against the liner during tilting of the cap in order to raise the liner and cigarettes longitudinally of the cigarettes relative to the face and edge and bottom walls of the body of the container, said paper box being made of a single blank folded about the bottom of the box, both of the side edges of the box being formed of inwardly folded laps extending longitudinally of the box, the top of the box being formed of inwardly folded flaps and a tab, the stirrup being formed of a single blank having side walls joined end to end by the cross strap, said blank being folded at the bottom of the container between the cross strap and the side walls, and the bottom of the box being reinforced by tabs so located and secured as not to interfere with the desired movement of the stirrup.

References Cited in the file of this patent

UNITED STATES PATENTS

1,505,748	Tamis	Aug. 18, 1924
1,735,323	L'Enfant	Nov. 12, 1929
1,735,325	L'Enfant	Nov. 12, 1929
2,247,871	Chalmers	July 1, 1941
2,396,150	Bonville	Mar. 5, 1946