Feb. 13, 1945. M. I. WILLIAMSON ET AL 2,369,389

HINGED COVER CONTAINER

Filed July 21, 1942 4 Sheets-Sheet 1

Fig. 1

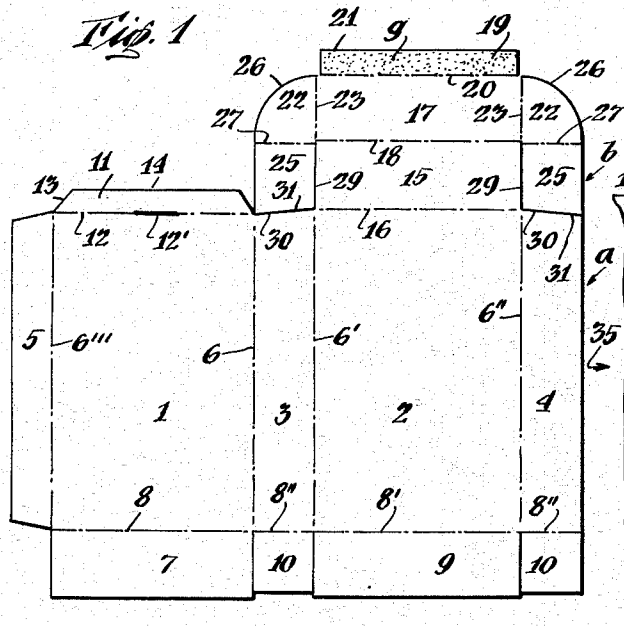


Fig. 2

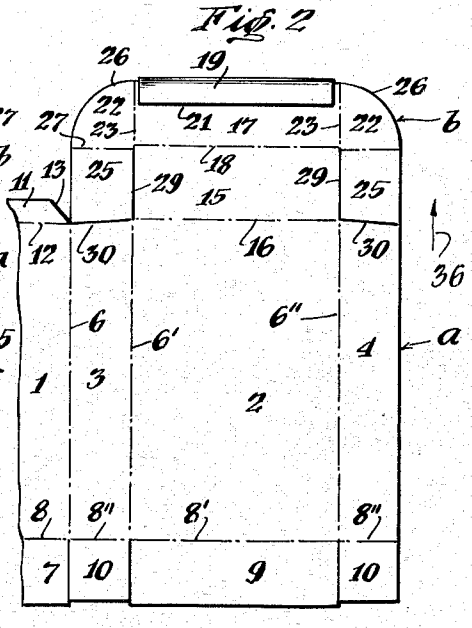


Fig. 3

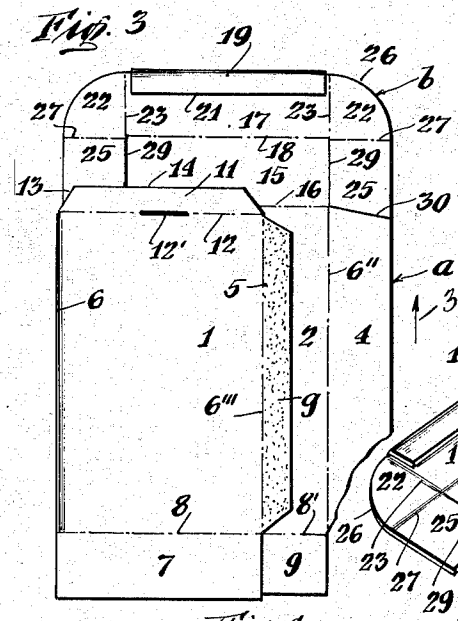


Fig. 5

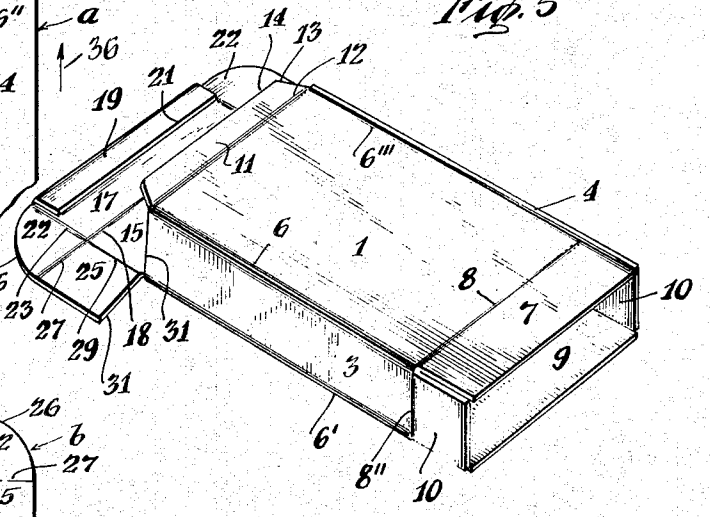
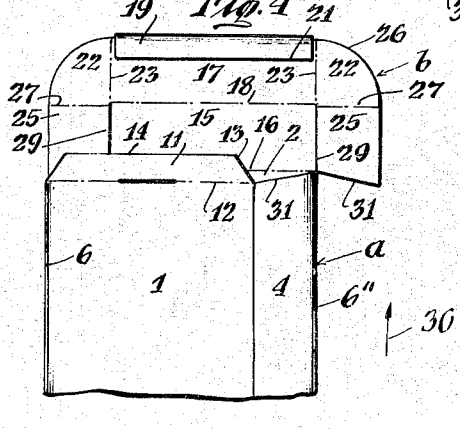


Fig. 4



INVENTORS
Marshall I. Williamson
BY Herman A. Carruth
Albert M. Austin
ATTORNEY

Feb. 13, 1945. M. I. WILLIAMSON ET AL 2,369,389

HINGED COVER CONTAINER

Filed July 21, 1942 4 Sheets-Sheet 2

Fig. 6

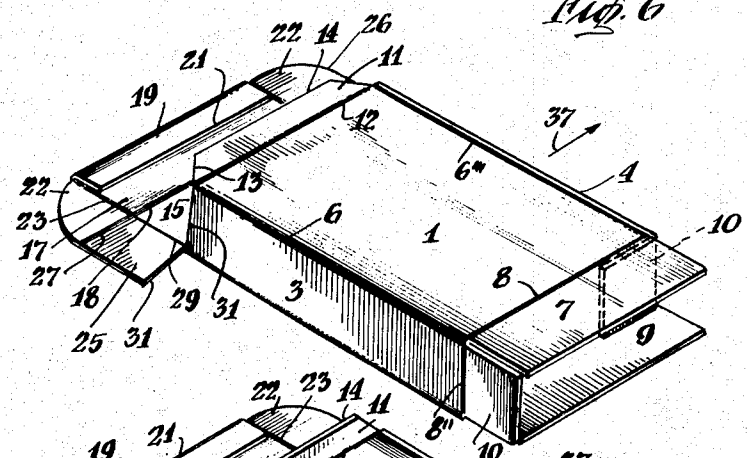


Fig. 7

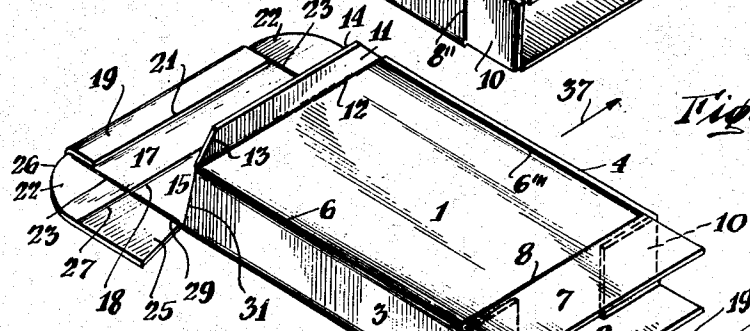


Fig. 8

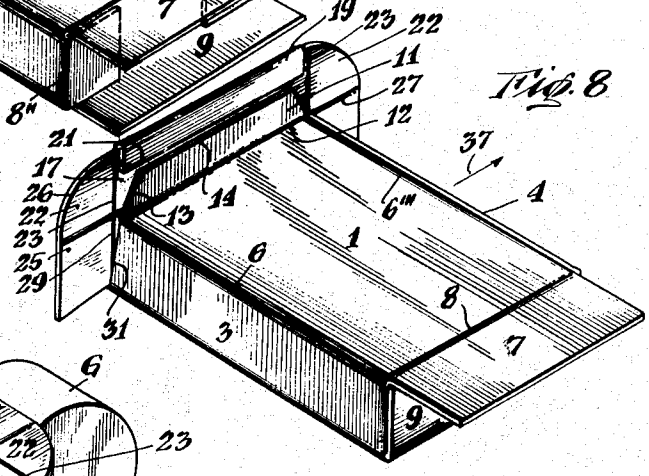
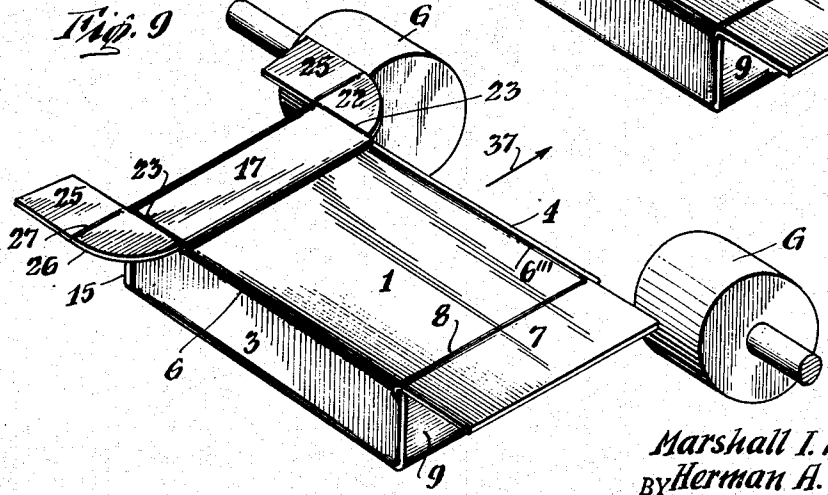


Fig. 9



INVENTORS
Marshall I. Williamson
BY Herman A. Carruth

Albert M. Austin
ATTORNEY

Feb. 13, 1945. M. I. WILLIAMSON ET AL 2,369,389

HINGED COVER CONTAINER

Filed July 21, 1942 4 Sheets-Sheet 3

Fig. 10

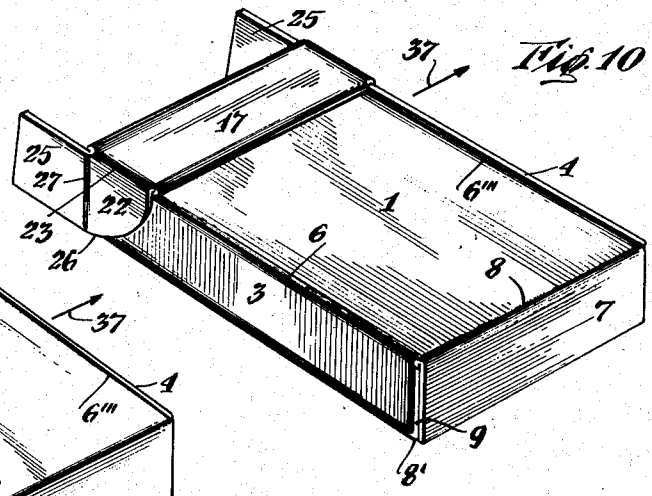


Fig. 11

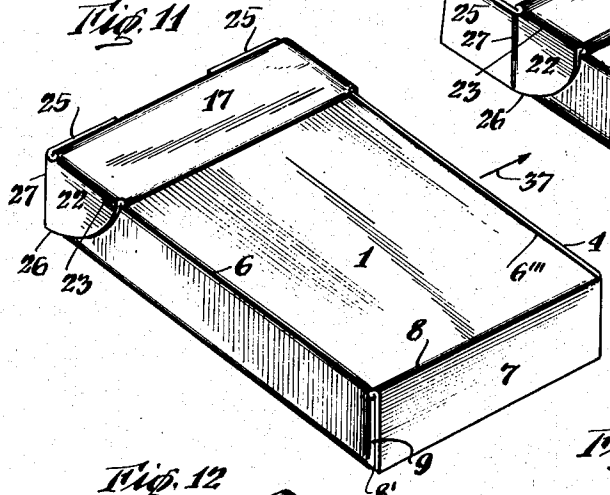


Fig. 12

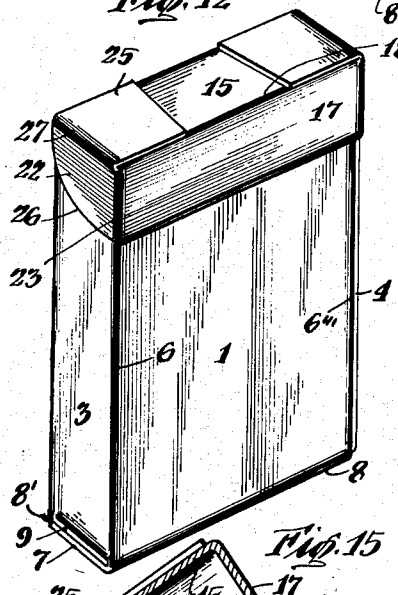


Fig. 13

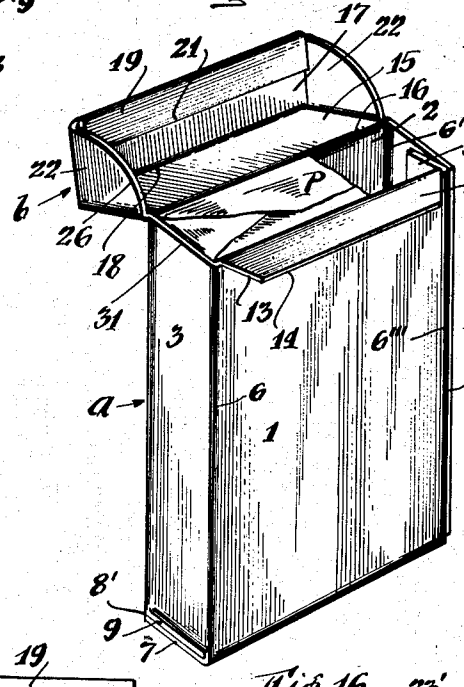


Fig. 14

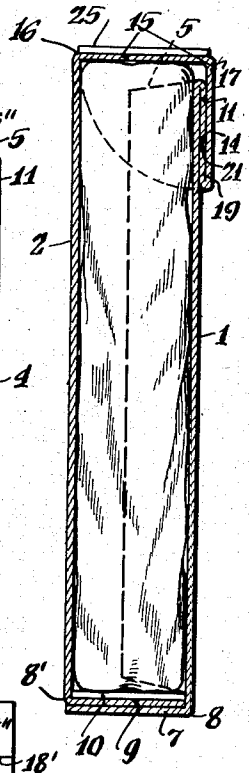


Fig. 15

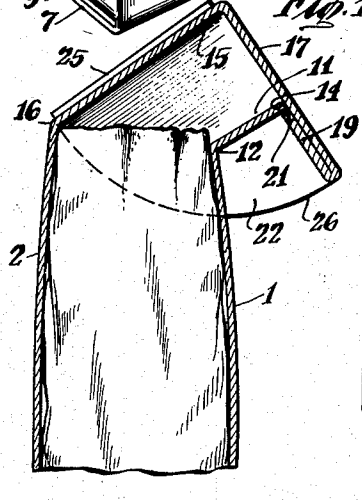
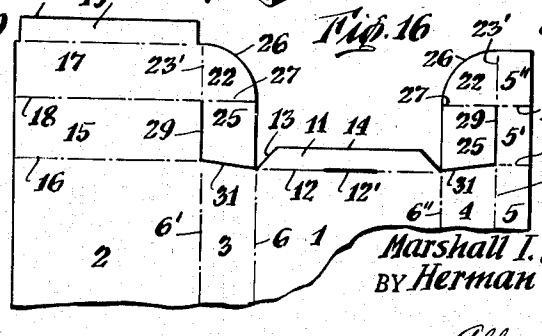


Fig. 16



INVENTORS
Marshall I. Williamson
BY Herman A. Carruth

Albert M. Austin
ATTORNEY

Feb. 13, 1945. M. I. WILLIAMSON ET AL 2,369,389

HINGED COVER CONTAINER

Filed July 21, 1942 4 Sheets-Sheet 4

Fig. 17

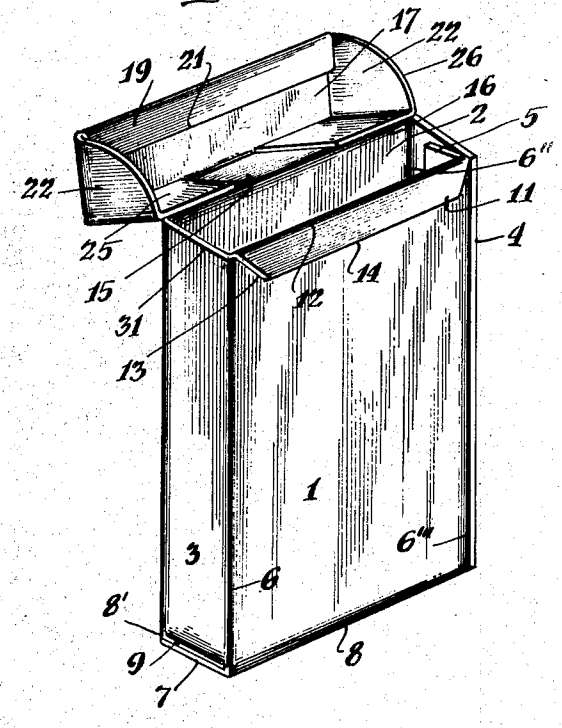


Fig. 18

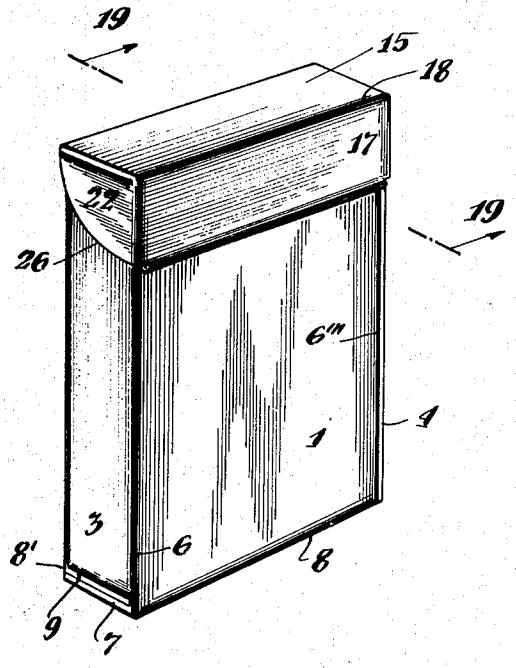
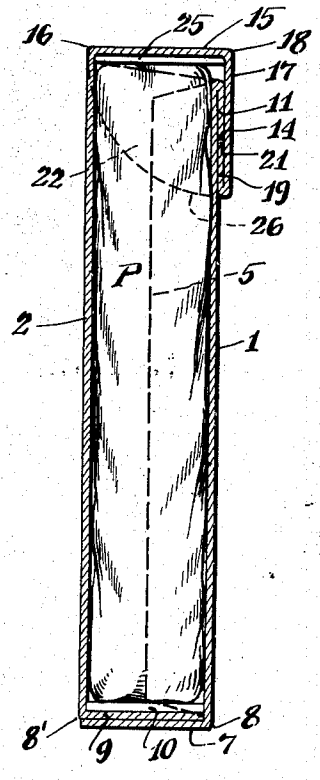


Fig. 19



INVENTORS
Marshall I. Williamson
BY Herman A. Carruth
Albert M. Austin
ATTORNEY

Patented Feb. 13, 1945 2,369,389

UNITED STATES PATENT OFFICE

2,369,389

HINGED COVER CONTAINER

Marshall I. Williamson, New York, N. Y., and Herman A. Carruth, Northford, Conn., assignors to National Folding Box Company, New Haven, Conn., a corporation of New Jersey

Application July 21, 1942, Serial No. 451,713

10 Claims. (Cl. 229—44)

The invention relates to hinged cover containers, and more particularly to a container formed from paperboard material comprising a box part having a cover part hinged thereto and adapted to be telescoped over the open end of the box part.

In accordance with this invention the improved hinged cover container may be formed from a single blank of paperboard material which need be finished and printed on one side thereof only. When the container is fully assembled only the finished side of the paperboard will be presented as the outside faces of the container. The blank is so cut and scored as to permit high speed automatic assembly thereof into a complete container. The blank comprises a cover forming part hingedly connected to a box forming part. The box forming part comprises hingedly connected front, rear and side wall panels which may be assembled to provide a tubular body and bottom flaps and tabs extending from the lower ends of the front, rear and side wall panels, which may be assembled to provide the botom wall of the box part.

The cover part comprises a top wall panel which is hinged to the rear wall panel of the box part. The top wall panel of the cover part also carries a front panel or flange section formed to telescope over the outside face of the front wall panel of the assembled box part. A side wall forming panel or section is hinged to each end of the front flange section of the cover part and carries a securing tab which can be secured to the top wall panel of the cover part to retain its associated side wall section in a plane extending substantially at right angles to the plane of the front flange section and the plane of the top wall panel. In one form of the invention the securing tabs are secured to the outside face of the top wall panel of the cover part and in another form of the invention the tabs are secured to the inside face of the top wall panel of the cover part.

An abutment flap connected to the front flange section of the cover part is so shaped and formed as to provide a fixed abutment edge which is adapted to cooperate with the abutment edge of a flap hinged to the front wall panel of the box part to provide means for retaining the cover part in closed telescoped position over the box part and to provide resistance to the opening of the cover part so that the cover part will not normally open until opening force is applied thereto.

The blank is so shaped and formed as to permit automatic assembly of the front, rear and side wall panels of the box part in collapsed tubular form. The partially assembled container may thus be economically shipped and stored with the tubular portion of the box part in collapsed form and with the unassembled cover part extending therefrom. The cover part as well as the bottom wall of the box part may be assembled by the merchandise manufacturer as the container is needed.

This improved container may be made in any length, width or depth desired, and is adapted for the packaging of various articles of merchandise which have heretofore been customarily packed in metal or other rigid hinged cover containers. Since the containers may be shipped to the merchandise manufacturer as partially assembled collapsed shells, substantial economies in shipping costs and storage space are realized. The merchandise manufacturer can proceed with the final assembly of the box part and the cover part and thereafter load the box part with merchandise by operations which can be performed automatically at high production speeds.

An object of this invention is to provide an improved hinged cover container which may be formed from a single blank of paperboard material and which can be assembled automatically at high production speeds.

Another object of this invention is to provide an improved hinged cover container formed from paperboard material, which can be used for the packaging of various articles of merchandise heretofore normally packaged in metal or other rigid hinged cover containers.

A further object of this invention is to provide an improved blank of paperboard material adapted for assembly into a hinged cover container by automatic machine operations.

A still further object of this invention is to provide an improved hinged cover container formed of paperboard material, which is attractive and neat in appearance, strong and sturdy in construction and serviceable in use, and which can be manufactured at a fraction of the cost of other hinged cover containers of comparable size and attributes.

Another object of this invention is to provide a container formed from paperboard material having a box part and a cover part hinged thereto and adapted to telescope over the open end of the box part, which is provided with means associated with the box part and cover part adapted to retain the cover part in closed position so as to prevent any undesired opening thereof and which may be nevertheless easily and quickly opened and closed, and which is so constructed that the cover part may be swung completely away from the open end of the box part so as not to interfere with the insertion or removal of the contents into or from the box part.

Other objects of this invention will become apparent as the disclosure proceeds.

Although the novel features which are believed to be characteristic of this invention will be particularly pointed out in the claims appended hereto, the invention itself, as to its objects and advantages and the manner in which it may be carried out, may be better understood by referring to the following description taken in connection with the accompanying drawings forming a part thereof, in which:

Fig. 1 is an inside face plan view of the paperboard blank which has been cut and scored ready for assembly into the improved container;

Fig. 2 is a partial view of the blank of Fig. 1 showing the fixed abutment flap folded over and secured to the inside face of the front flange section of the cover part;

Fig. 3 is a plan view of the blank as it appears at a further stage of assembly in which the front wall panel is shown folded over the rear wall panel;

Fig. 4 is a partial plan view of the blank showing the body portion thereof in assembled collapsed tubular form to provide an assembled collapsed shell;

Fig. 5 is a perspective view of the shell erected into hollow tubular form;

Fig. 6 is a perspective view of the partially assembled container showing the bottom tabs in the process of being folded inwardly as an initial step in the sealing and closing of the bottom end of the box part;

Fig. 7 is a perspective view of the container at a further stage of assembly, in which both bottom tabs have been turned inwardly;

Fig. 8 is a perspective view of the container at a still further stage of assembly, in which one of the bottom wall flaps of the box part and the top wall panel of the cover part have been folded into position;

Fig. 9 is a perspective view of the container at a further stage of assembly, wherein adhesive is being applied to the other bottom wall flap of the box part and to the securing tabs of the cover part simultaneously, with the front flange section of the cover part in position;

Fig. 10 is a perspective view of the container as it appears at one of its final stages of assembly, in which the box part has been completely assembled and the cover part still only partially assembled;

Fig. 11 is a perspective view of the fully assembled container with the cover part in closed position over the box part;

Fig. 12 is another perspective view of the fully assembled container showing further details of the construction of the cover part;

Fig. 13 is a perspective view of the container showing the cover part swung open and a merchandise plug contained within the box part;

Fig. 14 is a vertical cross-sectional view through the packed container with the cover part in closed position;

Fig. 15 is an enlarged fragmentary vertical cross-sectional view of the upper portion of the filled container showing the cover part partially lifted from the box part;

Fig. 16 is a plan view of a paperboard blank which presents substantially the same elements and forms the same container as the blank shown in Fig. 1 except that the body forming part of the blank is connected together in tubular form at a different corner point;

Fig. 17 is a perspective view of the fully assembled container formed from the blank shown in Fig. 1 but illustrating the manner in which the cover securing tabs may be secured to the inside face of the top wall panel of the cover part;

Fig. 18 is a perspective view of the container shown in Fig. 17 but with the cover part in closed position; and

Fig. 19 is a vertical cross-sectional view of the container shown in Fig. 18 as it appears when viewed along line 19—19 of Fig. 18.

Similar reference characters refer to similar parts throughout the several views of the drawings and the specification.

The individual box forming blanks as shown in Fig. 1 may be cut and scored from large sheets or rolls of paperboard material possessing the required strength and texture, which operation can be advantageously performed on an automatic cutting and scoring machine at a high production rate. The paperboard sheets or rolls need be finished and imprinted on one side thereof only which can be performed prior to cutting and scoring. The blanks emerging from the cutting and scoring machine are ready for assembly into collapsed assembled shells in the form shown in Fig. 4 on an automatic strip gluing and folding machine, at a high production rate and substantially without hand operation.

Fig. 1 illustrates the inside face view of the prepared blank which comprises essentially a box forming part *a* and a cover forming part *b* hingedly connected together along score line 16. The box forming part comprises a front wall panel 1, a rear wall panel 2, and side wall panels 3 and 4. Front wall panel 1 is connected by score line 6 along one side edge thereof to the side wall panel 3, the opposite side edge of side wall panel 3 is connected by score line 6′ to the rear wall panel 2, and the opposite side edge of rear wall panel 2 is connected to the side wall panel 4 by score line 6″. The front wall panel 1 is provided with a securing flap 5 defined by score line 6‴, the securing flap 5 being adapted to be adhesively secured to the opposite side wall panel 4. The score lines 6, 6′, 6″ and 6‴ may be arranged in substantially parallel relationship and extend longitudinally of the blank.

The bottom of the box part is formed by a bottom flap 7 hinged to the lower end of the front wall panel 1 along transversely extending score line 8, and a bottom flap 9 connected to the lower end of the rear wall panel 2 by transversely extending score line 8′. A bottom tab 10 is connected to the lower end of each of the side wall panels 3 and 4 by a transversely extending score line 8″. Score lines 8, 8′ and 8″ are slightly offset with respect to one another to permit proper folding assembly of the tabs 10 and bottom flaps 7 and 9, as is well known in the art.

The upper end of front wall panel 1 is provided with a resilient abutment flap 11 connected thereto along a transversely extending score line 12, which score line may be provided with spaced cuts or perforations 12′ to facilitate bending of the abutment flap 11. The ends of the hinged abutment flap 11 may be tapered as at 13. The free edge 14 of the hinged abutment flap 11 provides an abutment edge which cooperates with an abutment edge 21 of the fixed abutment flap 19 associated with the cover part *b*, in the manner more particularly described hereinafter.

The cover forming part *b* of the blank comprises more particularly a top wall panel 15 connected by a transversely extending score line 16 to the upper end of the rear wall panel 2 of the

box part. A front panel or flange section 17 is connected by transversely extending score line 18 to the top wall panel 15 while the abutment flap 19 is connected by transversely extending score line 20 to the front flange section 17. It will be noted that the score lines 16, 18 and 20 are substantially parallel to one another and extend across the full width of the cover part. It will also be noted that the distance between the transverse score lines 16 and 18 is slightly greater than the width of the side wall panels 3 and 4 of the box part, so that the cover part when fully assembled will snugly telescope over the upper end of the assembled box part.

The sides of the cover part are formed by a side wall forming panel or section 22 hingedly connected to each end of the front panel or flange section 17 by a longitudinally extending score line 23. The paired score lines 23 which define the ends of the front flange section 17 are spaced slightly farther apart than the score lines 6' and 6'' which define the side edges of the rear wall panel 2, so as to permit the side wall forming sections 22 of the cover part to snugly telescope over the outside face of the side wall panels 3 and 4 of the box part when the container is fully assembled. The outer ends 26 of the side wall forming sections 22 may be given an arcuate configuration to enhance the appearance of the cover part.

A securing tab 25 is hingedly connected to each of the side wall sections 22 of the cover part along the score line 27 which is substantially a continuation of the score line 18. Each tab 25 is separated from the adjacent end of the top wall panel 15 of the cover part by a cut line 29 which extends longitudinally of the blank and substantially in alignment with the score line 23. Each tab 25 is also separated from the upper end of the side wall panel of the box part by a cut 30. When the box is assembled the tabs 25 are secured to the top wall panel 15 of the cover part to maintain the cover part in rigid assembly. The tabs 25 may be cut to any desired shape, but when formed as shown in Fig. 1, stripping out of small waste portions of the paperboard is wholly eliminated.

It will be noted that the upper ends of the side wall panels 3 and 4 present along the cut 30 a beveled edge 31 and that the rear wall panel 2 is slightly higher than the front wall panel 1, with the transversely extending score line 12 out of alignment with and slightly below the score line 16. The hinged abutment flap 11 and the fixed abutment flap 19 are substantially the same length as measured longitudinally of the blank and their combined length is slightly less than the length of the front flange 17 of the cover part. When the abutment flaps 11 and 19 are thus proportioned, positive interengagement between the respective abutment edges 14 and 21 thereof is assured when the container is assembled.

The prepared blank as shown in Fig. 1 is fed into an automatic gluing and folding machine, which may be of the right angled type, with the blank as shown in Fig. 1 being advanced on a continuous conveyor in the direction of the arrow 35 as shown in Fig. 1. During this advance a strip of adhesive *g* is applied to the upwardly facing inside face of the abutment flap 19 and during further progress of the blank the glued flap 19 is folded over into adhesive contact with the inside face of the front flange 17 of the cover part.

The blank then changes its course of travel so as to move in the direction of the arrow 36 as shown in Figs. 2, 3 and 4. During this second stage of travel a strip of adhesive *g* is applied to the outside face of the securing flap 5. Following this gluing operation the front wall panel 1 is folded about score line 6 so as to overlie the inside face of the side wall panel 3 and the rear wall panel 2, as illustrated in Fig. 3. During further travel of the blank, side wall panel 4 is folded about the score line 6'' so that its free edge overlies the glued securing flap 5. Suitable pressure rollers or similar devices then come into play to press the side wall panel 4 into firm adhesive engagement with the securing flap 5, producing the collapsed assembled shell as shown in Fig. 4.

The collapsed assembled shell shown in Fig. 4 may be assembled on an automatic strip gluing and folding machine at speeds as high as 20,000 per hour or higher. The collapsed assembled shells emerging from this machine may be stacked in boxes or packages in a minimum of space and shipped to the merchandise manufacturer in this condition at a great saving in transportation cost as compared with fully erected containers. The merchandise manufacturer can store the collapsed assembled shells until such time as merchandise is to be packed therein. The merchandise manufacturer may be equipped with automatic high speed assembly machines for completing the assembly of the boxes and packaging the same with merchandise.

When merchandise is to be packed in the collapsed assembled shell as shown in Fig. 4, the body of the box part *a* is erected into the tubular form shown in Fig. 5. If desired, the merchandise can then be inserted into the expanded box part or the merchandise can be inserted, if desired, at a later stage in the assembly operations. The blank is so constructed as to permit simultaneous assembly of the bottom end of the box part and the cover part by a series of assembly operations illustrated in Figs. 6 to 11 inclusive. The assembly operation may be performed while the rear wall panel 2 of the container rests in a horizontal position on a continuous moving conveyor and while the shell advances in the direction of the arrow 37, shown in Figs. 6 to 11 inclusive.

During the travel of the shell in the direction of the arrow 37 as shown in Fig. 6, the leading bottom wall tab 10 is first folded inwardly, followed by the inward folding of the trailing bottom tab 10 as shown in Fig. 7, so that both tabs substantially align with the score line 8. During further continued travel of the expanded shell in the direction of the arrows shown in Figs. 6, 7 and 8 the bottom wall flap 9 is folded upwardly to overlie the tabs 10 and substantially simultaneously the top wall panel 15 of the cover part is erected into the vertical position shown in Fig. 8. When the top wall panel 15 is so positioned the front flange forming section 17 will also extend upwardly and the hinged abutment flap 11 will rest against the inside face of the flange section 17. As shown in Fig. 8, the abutment edge 14 of hinged abutment flap 11 and the abutment edge 21 of fixed flap 19 will be slightly spaced apart with the flaps 11 and 19 substantially in alignment.

At the next operation and during further progress of the partially assembled blank in the direction of the arrow 37 as shown in Fig. 9, the front flange section 17 of the cover part is folded

downwardly so as to overlie the outside face of the front wall panel 1 of the box part. While the front flange 17 is held in this position, the partially assembled box advances over glue rollers G, shown in Fig. 9, which operate to apply a strip of adhesive to the under surface of the bottom wall flap 7 of the box part and to the under surface of each securing tab 25 of the cover part which project laterally beyond the top wall panel 15 of the cover part when the front flange section 17 is in downfolded position.

In the next operation and during travel of the partially assembled box in the direction of the arrow 37 as shown in Fig. 10, the bottom wall flap 7 is folded into adhesive engagement with the outside face of the upturned bottom wall flap 9 and substantially simultaneously the side wall sections 22 of the cover part are folded downwardly so as to overlie the adjacent side wall panels of the box part.

As the final assembly operation and while the box assembled as shown in Fig. 10 moves in the direction of the arrow 37, the securing tab 25 at the advancing edge of the shell is folded rearwardly into adhesive contact with the outside face of the top wall panel 15, and substantially simultaneously the trailing securing tab 25 is folded forwardly into adhesive contact with the outside face of the top wall panel 15. As thus assembled the container appears as shown in Figs. 11 and 12 with the cover part in closed position over the box part.

There is shown and illustrated in Fig. 16 an inside face view of a prepared blank which is similar to the blank shown in Fig. 1 and presents substantially the same elements, except that certain elements have been rearranged. The container formed from the blank shown in Fig. 16, however, has the same exterior appearance as the containers shown in Figs. 5 to 15 inclusive, except that the securing flap 5 of the blank shown in Fig. 16 is secured to the free edge of the rear wall panel 2, whereas the securing flap 5 shown in Fig. 1 is secured to the free edge of the side wall panel 4. In the blank shown in Fig. 16 the securing flap 5 is connected to the side wall panel 4 along the longitudinally extending score line 6'''. Securing flap 5 is also provided with an extension 5' connected to the upper end thereof by a transverse score line 16' which aligns with the score line 16 and a further extension 5'' connected along a transverse score 18' to the upper end of extension 5'. Transverse score line 18' aligns with the transverse score line 18.

Also, one of the side wall sections 22 of the cover part is hinged to extension 5'' along longitudinally extending score line 23' which is substantially in alignment with the score line 6'''. Securing tab 25 is separated from the securing flap extension 5' by a cut line 29 and is hinged to the adjacent side wall section 22 by the transverse score line 27 which is substantially in alignment with the score line 27 which joins the end of the score line 18.

In assembling the blank shown in Fig. 16, a strip of adhesive is applied to the under face of the securing flap 5 and flap extensions 5' and 5'', and the side wall panel 4 is then folded about the score line 6'' so as to overlie the inside face of front wall panel 1. Rear wall panel 2 is then folded about score line 6 so as to overlie the side wall panel 3 and a portion of the front wall panel 1, with the free side edge of the rear wall panel 2 pressed into adhesive engagement with securing flap 5, with the free edge of the top wall panel 15 pressed into adhesive engagement with the flap extension 5', and with the free side edge of the front wall section 17 pressed into adhesive engagement with the flap extension 5''. When thus assembled the blank shown in Fig. 16 will have substantially the same exterior appearance as the assembled collapsed blank shown in Fig. 5 and the erection and assembly of the blank shown in Fig. 16 may be similar to the assembly steps illustrated in Figs. 5 to 11 inclusive. The finished box would appear substantially as illustrated in Figs. 12 and 13.

The container illustrated in Fig. 17 may be formed from the blank shown in Fig. 1 or the blank shown in Fig. 16. This container is identical with the container illustrated in Fig. 13 except that the securing tabs 25 associated with the cover part of the container shown in Fig. 17 are secured to the inside face of top wall panel 15 rather than to the outside face thereof as illustrated in Fig. 12. The particular succession of steps for assembling the container shown in Fig. 17 have not been illustrated since they form no part of this invention.

On completion of the container the cover part b is swung open, as shown in Figs. 13 and 17, and the merchandise plug P is inserted into the box part, which operation can be automatically performed. The cover part is then swung into closed position with the abutment edge 14 of the hinged abutment flap 11 abutting the abutment edge 21 of the fixed abutment element or flap 19. By reason of the beveled upper edges 31 of the side wall panels 3 and 4, the top wall panel 15 may be pressed downward so as to lie at substantially an acute angle to the rear wall panel 2. Since the abutment elements 11 and 19 have a combined length which is less than the comparative length of the front flange 17 of the cover part, the abutment edge 21 of the fixed abutment element 19 is entirely free to swing under and engage the abutment edge 14 of the hinged abutment flap 11 when the top wall panel 15 of the cover part is pressed so as to substantially abut the beveled upper edges 31 of the side wall panels 3 and 4. Due to the inherent resiliency of the paperboard material, top wall panel 15 will swing upwardly into substantially horizontal position and substantially at right angles to the rear wall panel 2 when pressure on the top wall panel 15 is released. When this occurs, abutment edge 21 of the abutment element or flap 19 will engage and abut the abutment edge 14 of the hinged abutment flap 11.

When access to the contents is desired, upward pressure is exerted on the lower free edge of the front flange 17 of the cover part. Stresses are thus imposed upon the front wall panel 1 and the rear wall panel 2 of the box part, causing them to bow inwardly as illustrated in Fig. 15. The stresses thus engendered resist opening of the cover part and maintain the cover part in positive closed position until sufficient upward force is exerted on the front flange 17 of the cover part to overcome this resistance. However, a relatively slight downward force only need be exerted on the top wall panel 15 of the cover part to effect closing of the cover part. Resistance to opening of the cover part continues until the hinged abutment flap 11 extends at substantially an obtuse angle to the front wall panel 1. The hinged abutment flap 11 and the fixed abutment element or flap 19 are so shaped and proportioned as to offer the desired resistance to the normal opening of the cover part, so that the cover

part is retained in closed position and will not open during normal handling of the container. The cover part can only be opened by applying force to the front flange section 17 of the cover part sufficient to overcome the resistance offered by the hinged abutment flap 11 and the fixed abutment element or flap 19.

The blanks shown in Figs. 1 and 16 can be cut and formed at high speed on an automatic cutting and scoring machine. The paperboard sheets or rolls need be finshed on one side only and may be imprinted before the blanks are cut. The individual blanks can be glued and assembled in collapsed form, as shown in Fig. 4, in which condition they can be economically shipped and stored. The blank is so formed and proportioned as to permit high speed automatic assembly and packaging of the containers by a few high speed assembly operations.

The improved container above described is strong and sturdy in construction and attractive in appearance. It is adapted for the packaging of numerous articles of merchandise such as smoking tobacco, cigars and cigarettes, and a great variety of other packaged goods which are desirably packed in a container having a hinged cover. The improved container herein described is adapted for numerous uses where metal or other rigid hinged cover containers have heretofore been employed and can be manufactured and assembled at a cost substantially less than the cost of making and assembly such comparable containers and is equally as serviceable for most uses.

While certain novel features of the invention have been disclosed and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of the invention.

What is claimed is:

1. An improved hinged cover container comprising, a box part defined by connected front, rear and side wall panels and inturned bottom forming flaps and an open upper end, and a cover part for said open upper end, said cover part having a top wall panel hinged to the upper edge of the rear wall panel of the box part, a front flange section hinged to said top wall panel and adapted to telescope over the front wall panel of the box part, a side wall section hinged to each end of the front flange section and adapted to telescope over the adjacent side wall panel of the box part, and a securing tab hinged to each of said side wall sections and secured to the outside face of said top wall panel, and a pair of cooperating abutment elements associated with the box part and the cover part substantially wholly contained within the cover part when the cover part is in closed position, one of said abutment elements being fixed to the box part and overlying the outside face and adjacent to the open end thereof, said other abutment element being fixed to said cover part and overlying the inside face thereof, said abutment elements being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward opened position, one of said abutment elements comprising a hinged flap having an abutment edge arranged to move into abutment with an abutment edge of the other abutment element and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to opened position.

2. An improved hinged cover container comprising a box part having a body formed by connected front, rear and side wall panels and a bottom wall formed by overlapping bottom wall flaps connected to said front and rear wall panels and an open upper end, and a cover part for said open upper end, said cover part having a top wall panel hinged to the upper edge of the rear wall panel of the box part, a front flange section hinged to said top wall panel and adapted to telescope over the front wall panel of the box part, a side wall section hinged to each end of the front flange section and adapted to telescope over the adjacent side wall panel of the box part, and a securing tab hinged to each of said side wall sections and secured to the inside face of said top wall panel, and a pair of cooperating abutment elements associated with the box part and the cover part substantially wholly contained within the cover part when the cover part is in closed position, one of said abutment elements being fixed to the box part and overlying the outside face and adjacent to the open end thereof, said other abutment element being fixed to said cover part and overlying the inside face thereof, said abutment elements being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward opened position, one of said abutment elements comprising a hinged flap having an abutment edge arranged to move into abutment with an abutment edge of the other abutment element and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to opened position.

3. An improved hinged cover container comprising a box part having a body formed by connected front, rear and side wall panels and a bottom wall formed by overlapping bottom wall flaps connected to said front and rear wall panels, said box part having an open upper end, said rear wall panel being higher than said front wall panel and said side wall panels having correspondingly inclined upper ends, a cover part for said open end, said cover part having a top wall panel hinged to the upper edge of the rear wall panel of the box part, a front flange section hinged to said top wall panel and adapted to telescope over the front wall panel of the box part, a side wall section hinged to each end of the front flange section and adapted to telescope over the adjacent side wall panel of the box part, and a securing tab hinged to each of said side wall sections and secured to said top wall panel, and a pair of cooperating abutment elements associated with the box part and the cover part substantially wholly contained within the cover part when the cover part is in closed position, one of said abutment elements being fixed to the box part and overlying the outside face and adjacent to the open end thereof, said other abutment element being fixed to said cover part and overlying the inside face thereof, said abutment elements being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward opened position, one of said abutment elements comprising a hinged flap having an abutment

edge arranged to move into abutment with an abutment edge of the other abutment element and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to opened position.

4. An improved hinged cover container comprising, a box part having a front wall panel, a rear wall panel, intermediate side wall panels, and an open upper end, a cover part for said open end comprising a top wall panel hinged to the upper end of the rear wall panel of the box part, a front flange section connected along a score line to the front edge of said top wall panel and adapted to telescope over the front wall panel of the box part, a side wall section connected along a score line to each side edge of the front flange section and adapted to telescope over the adjacent side wall panel of the box part, a tab connected along a score line to each of said side wall sections overlapping and firmly secured to the adjacent end of the top wall panel to thereby maintain said side wall sections and said front flange section at substantially right angles to said top wall panel, a pair of cooperating abutment elements associated with the box part and the cover part substantially wholly contained within the cover part when the cover part is in closed position, one of said abutment elements, being connected to the box part and overlying the outside face and adjacent to the open end thereof, said other abutment element being connected to said cover part and overlying the inside face thereof, said abutment elements being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward opened position, one of said abutment elements comprising a hinged flap having an abutment edge arranged to move into abutment with an abutment edge of the other abutment element and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to opened position.

5. An improved hinged cover container comprising, a box part having a front wall panel, a rear wall panel, intermediate side wall panels, a bottom wall panel, and an open upper end, a cover part for said open end having a top wall panel hinged to the upper end of the rear wall panel of the box part, a front flange section connected along a score line to the front edge of said top wall panel and adapted to telescope over the front wall panel of the box part, a side wall section connected along a score line to each side edge of the front flange section and adapted to telescope over the adjacent side wall panel of the box part, a tab connected along a score line to each of said side wall sections overlapping and firmly secured to the adjacent end of the top wall panel and rigidly secured thereto thereby maintaining said side wall sections and said front sections at substantially right angles to said top wall panel, a pair of cooperating abutment elements associated with the box part and the cover part substantially wholly contained within the cover part when the cover part is in closed position, one of said abutment elements comprising a flap hinged to the upper end of the front wall panel of the box part and overlying the outside face and adjacent to the open end thereof, said other abutment element being fixed and extending along the inside face of the cover part, said abutment elements being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward opened position, said hinged flap having an abutment edge arranged to move into abutment with an abutment edge of said fixed abutment element and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to opened position.

6. An improved hinged cover container formed from a single blank of paperboard material comprising, a box part having a front wall panel, a rear wall panel, intermediate side wall panels, a bottom wall panel, and an open upper end, a cover part for said open end having a top wall panel hinged to the upper end of the rear wall panel of the box part, a front flange section connected along a score line to the front edge of said top wall panel and adapted to telescope over the front wall panel of the box part, a side wall section connected along a score line to each side edge of the front flange section and adapted to telescope over the adjacent side wall panel of the box part, a tab connected along a score line to each of said side wall sections overlapping and secured to the adjacent end of the top wall panel and rigidly secured thereto thereby maintaining said side wall sections and said front section at substantially right angles to said top wall panel, a pair of cooperating hinged and fixed abutment elements associated with the box part and the cover part substantially wholly contained within the cover part when the cover part is in closed position, one of said abutment elements comprising a flap hinged to the upper end of the front wall panel of the box part and overlying the outside face and adjacent to the open end thereof, said other abutment element comprising an abutment strip fixed to and extending along the inside face of the cover part, said abutment flap and strip being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward opened position, said hinged flap having an abutment edge arranged to move into abutment with the abutment edge presented by said abutment strip and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to opened position.

7. An improved one-piece paperboard blank adapted for automatic machine assembly into a hinged cover container comprising, a box forming part having a front wall panel, a rear wall panel, a pair of side wall panels and a securing flap hingedly connected in side-by-side relationship, a bottom forming flap hinged to the lower edge of each of said front and rear wall panels, a cover forming part for the open end of the assembled box part comprising a top wall panel hingedly connected to the upper edge of the rear wall panel of the box part along a fold line, said top wall panel having the dimensions of the open end of the assembled box part and having hingedly connected thereto along an edge thereof opposite said first named edge, a flexible cover front panel coextensive with the edge of the cover top panel to which it is hinged, said cover front panel having hingedly connected thereto at the ends

thereof flaps forming cover side panels, said flaps having tabs secured thereto for securing said cover front panel and said cover side panels in right-angular relationship to said top wall panel, said cover front panel having an abutment element of less width than said cover front panel secured to the edge of the said cover front panel opposite its hinged edge for presenting an abutment edge intermediate the width of said cover front panel, an elongated abutment element of less width than said cover front panel secured to the upper edge of the front panel of the box part for presenting a downwardly facing abutment edge, one of said abutment elements being secured in face-to-face relation with the front panel to which it is attached, the other of said elements being a flap hingedly and swingably secured to the front panel to which it is attached, the combined width of said abutment elements being not greater than the width of said cover front panel.

8. An improved one-piece paperboard blank adapted for automatic machine assembly into a hinged cover container comprising, a box forming part having a front wall panel, a rear wall panel, a pair of side wall panels and a securing flap hingedly connected in side-by-side relationship, a bottom forming flap hinged to the lower edge of each of said front and rear wall panels, a bottom tab hinged to the lower edge of each of said side wall panels, a cover forming part for the open end of the assembled box part comprising a top wall panel hingedly connected to the upper edge of the rear wall panel of the box part along a fold line, said top wall panel having the dimensions of the open end of the assembled box part and having hingedly connected thereto along an edge thereof opposite said first named edge, a flexible cover front panel coextensive with the edge of the cover top panel to which it is hinged, said cover front panel having hingedly connected thereto at the ends thereof flaps forming cover side panels, said flaps having tabs hinged thereto for securing said cover front panel and said cover side panels in right-angular relationship to said top wall panel, said cover front panel having an abutment flap of less width than said front panel secured to the edge of the said cover front panel opposite its hinged edge for presenting an abutment edge intermediate the width of said cover front panel, an elongated abutment flap of less width than said cover front panel secured to the upper edge of a front panel of the box part for presenting a downwardly facing abutment edge, one of said abutment flaps being secured in face-to-face relation to the cover front panel, the other of said abutment flaps being hingedly and swingably secured to the box front panel, the combined width of said abutment flaps being not greater than the width of said cover front panel.

9. A collapsed paperboard shell having an open ended box forming part and a cover forming part adapted for automatic machine assembly into a hinged cover container, said box forming part having front, rear and side wall panels hingedly connected along the side edges thereof to provide a collapsible tubular body, a bottom forming flap extending from the bottom end of each of said front and rear wall panels, a cover forming part for the open end of the assembled box part comprising a top wall panel hingedly connected to the upper edge of the rear wall panel of the box part along a fold line, said top wall panel having the dimensions of the open end of the assembled box part and having hingedly connected thereto along an edge thereof opposite said first named edge, a flexible cover front panel coextensive with the edge of the cover top panel to which it is hinged, said cover front panel having hingedly connected thereto at the ends thereof flaps forming cover side panels, said flaps having tabs hinged thereto for securing said cover front panel and said cover side panels in right-angular relationship to said top wall panel, said cover front panel having an abutment element of less width than said cover front panel secured to the edge of the said cover front panel opposite its hinged edge for presenting an abutment edge intermediate the width of said cover front panel, an elongated abutment element of less width than said cover front panel secured to the upper edge of the front panel of the box part for presenting a downwardly facing abutment edge, one of said abutment elements being secured in face-to-face relation with the front panel to which it is attached, the other of said elements being a flap hingedly and swingably secured to the front panel to which it is attached, the combined width of said abutment element being not greater than the width of said cover front panel.

10. A collapsed paperboard shell having an open ended box forming part and a cover forming part adapted for automatic machine assembly into a hinged cover container, said box forming part having front, rear and side wall panels hingedly connected along the side edges thereof to provide a collapsible tubular body, a bottom forming flap extending from the bottom end of each of said front and rear panels, a bottom tab extending from the bottom end of each of said side wall panels, a cover forming part for the open end of the assembled box part comprising a top wall panel hingedly connected to the upper edge of the rear wall panel of the box part along a fold line, said top wall panel having the dimensions of the open end of the assembled box part and having hingedly connected thereto along an edge thereof opposite said first named edge, a flexible cover front panel coextensive with the edge of the cover top panel to which it is hinged, said cover front panel having hingedly connected thereto at the ends thereof flaps forming cover side panels, said flaps having tabs hinged thereto for securing said cover front panel and said cover side panels in right-angular relationship to said top wall panel, said cover front panel having an abutment flap of less width than said cover front panel secured to the edge of the said cover front panel opposite its hinged edge for presenting an abutment edge intermediate the width of said cover front panel, an elongated abutment flap of less width than said cover front panel secured to the upper edge of a front panel of the box part for presenting a downwardly facing abutment edge, one of said abutment flaps being secured in face-to-face relation to the cover front panel, the other of said abutment flaps being hingedly and swingably secured to the box front panel, the combined width of said abutment flaps being not greater than the width of said cover front panel.

MARSHALL I. WILLIAMSON.
HERMAN A. CARRUTH.