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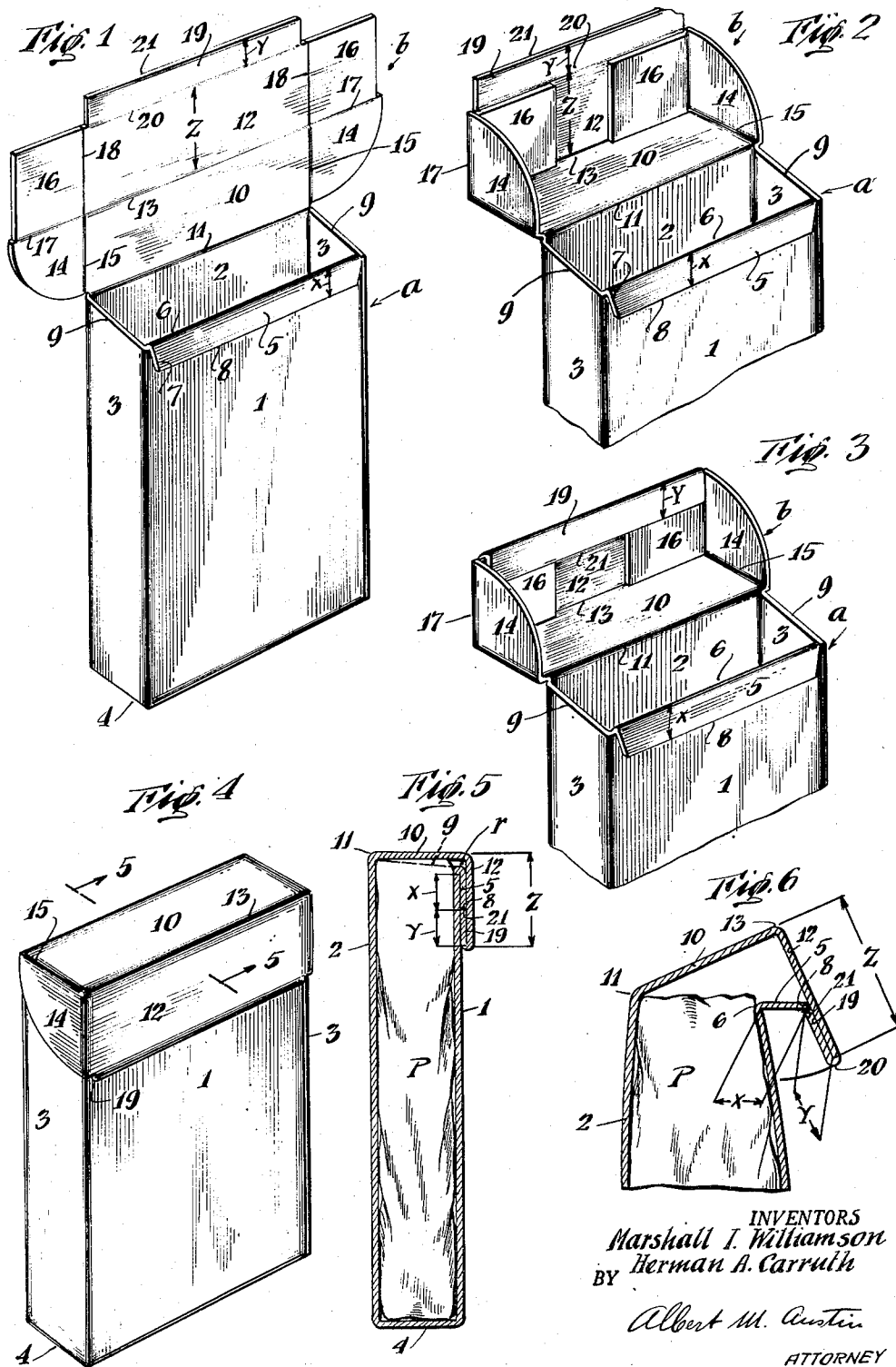
M. I. WILLIAMSON ET AL

2,369,387

HINGED COVER CONTAINER

Filed July 21, 1942

4 Sheets-Sheet 1



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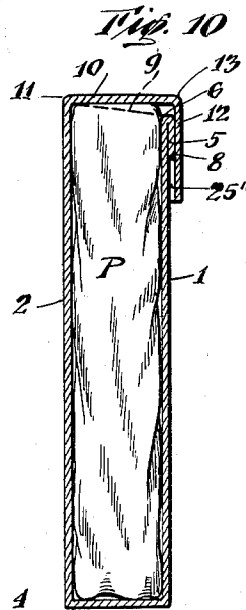
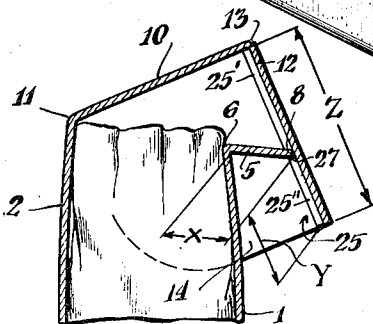
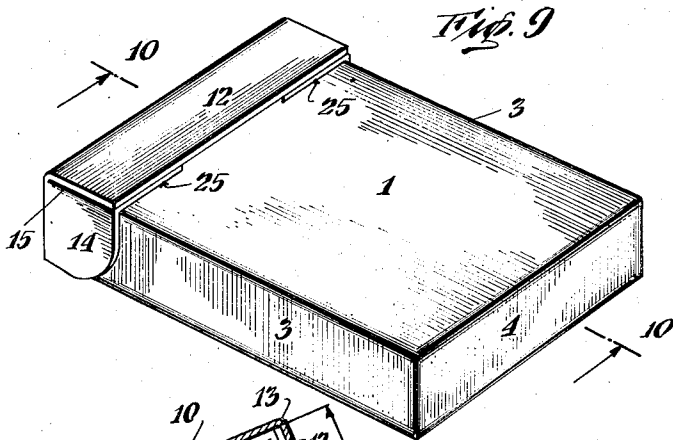
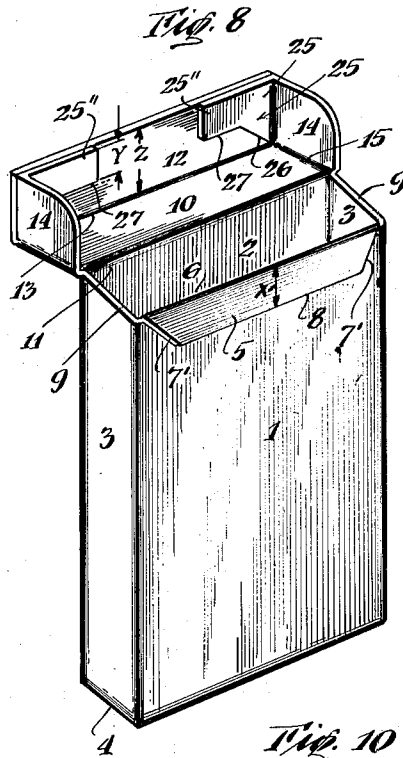
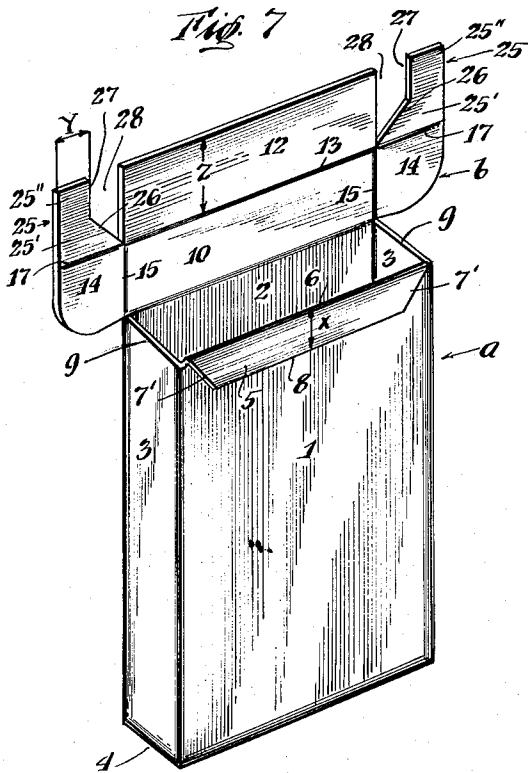
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4 Sheets-Sheet 2



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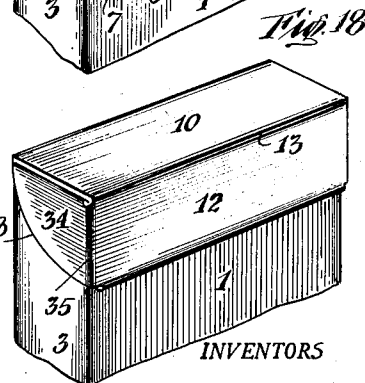
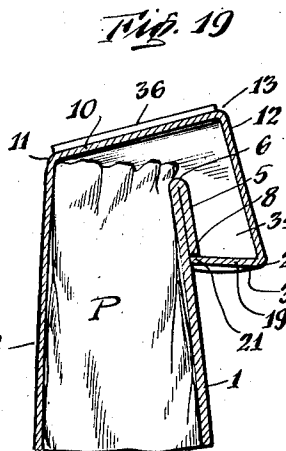
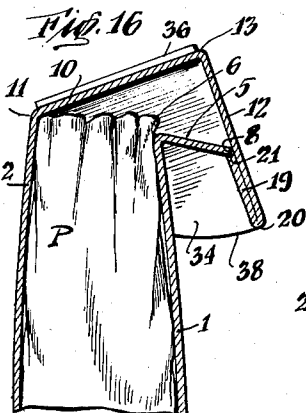
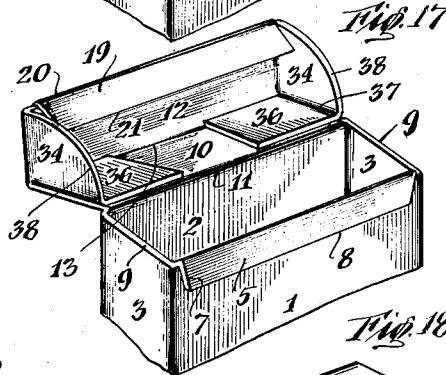
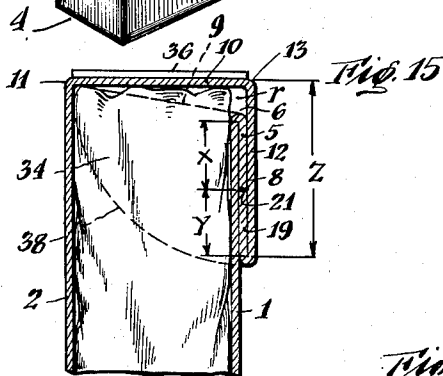
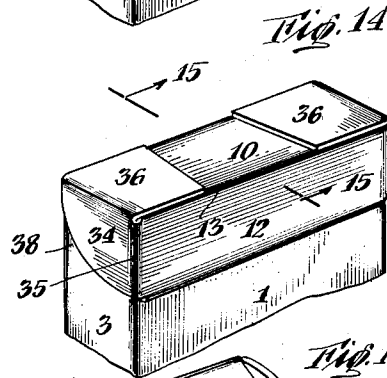
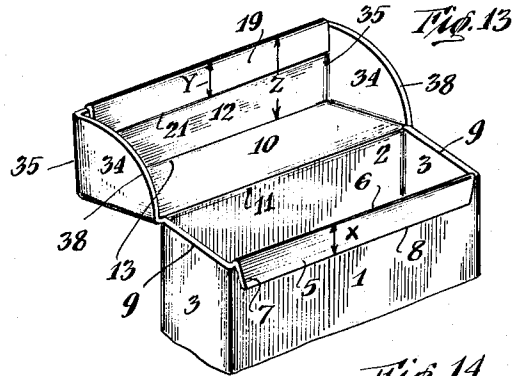
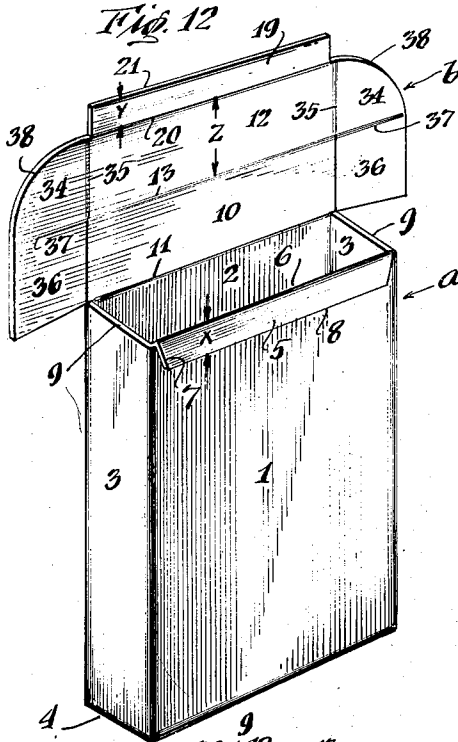
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HINGED COVER CONTAINER

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4 Sheets-Sheet 3



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HINGED COVER CONTAINER

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4 Sheets-Sheet 4

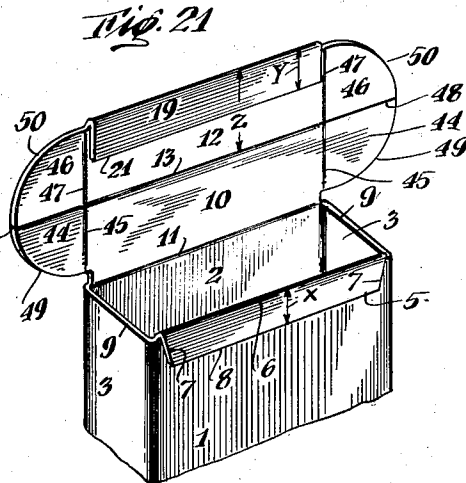
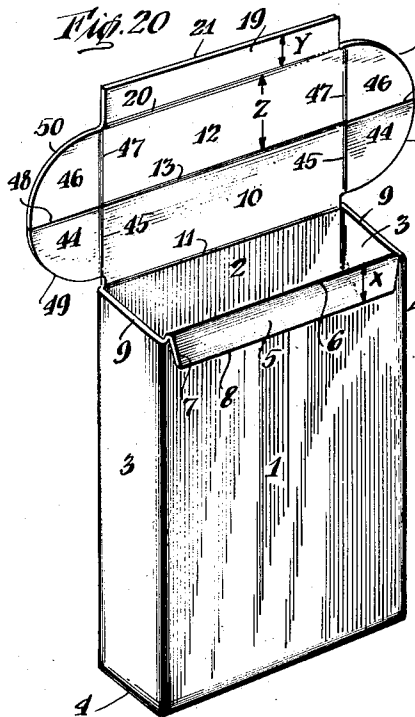


Fig. 22

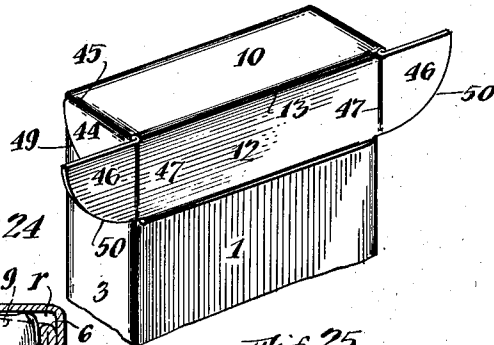


Fig. 23

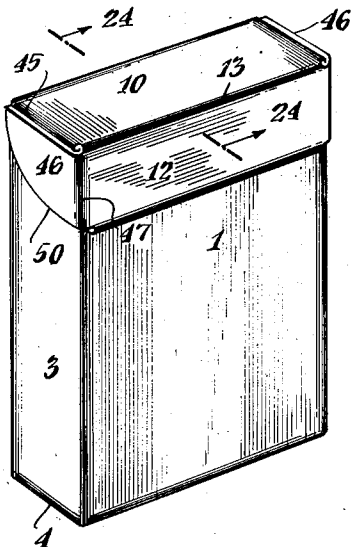


Fig. 24

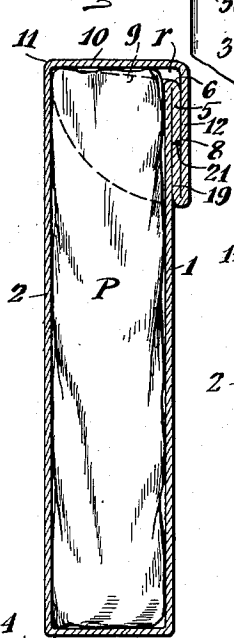
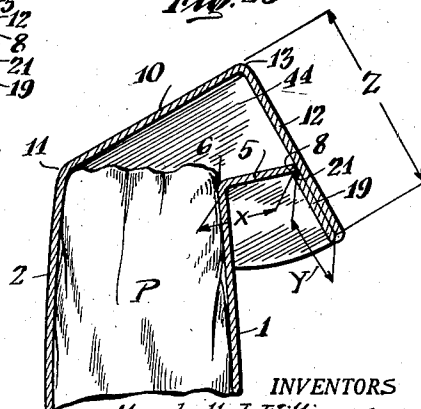


Fig. 25



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UNITED STATES PATENT OFFICE

2,369,387

HINGED COVER CONTAINER

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Application July 21, 1942, Serial No. 451,711

9 Claims. (Cl. 229-44)

This invention relates to hinged cover contain-
ers, and more particularly to a container formed
from paperboard or other suitably flexible mate-
rial comprising a box part having a hinged cover
part associated therewith adapted to telescope

over the open end of the box part.
In accordance with this invention, the box part
may comprise multiple side-enclosing panels
suitably connected to provide a tubular body.
Such box parts are also usually provided with a
bottom wall panel suitably secured to the en-
closing side wall panels to provide a bottom end
closure for the tubular body.

The cover part of the container comprises a top
wall panel hinged to the upper edge of the rear
wall panel of the box part, a front panel or flange
section adapted to fit snugly over an opposite
front wall panel of the box part, and side wall
panels or sections adapted to fit snugly over the
intermediate side enclosing panels of the box
part. The side wall sections of the cover part are
suitably firmly secured to the adjacent ends of
the top wall panel and front flange section and
may be so shaped as to give the cover part a neat
and trim appearance.

Hinged cover containers made of paperboard
and other flexible material and comprising a box
part and a cover part hinged to and adapted to
close over the upper end of the box part have
enjoyed only limited use due to the difficulty in
retaining the cover part in fixed closed position
so that the cover part will not fly open during
normal handling of the filled container, and also
because most such containers heretofore have had
closures not affording maximum ease and speed
of opening and reclosing their closures, usually
requiring manual infolding of various tabs and
the parts which interfere with discharge of con-
tents.

In metal and other rigid hinged cover contain-
ers substantial frictional resistance to the open-
ing of the cover part is achieved by the substan-
tial frictional contact between the enclosing
flanges of the cover part and the walls of the box
part. The same degree of frictional resistance
between the enclosing flanges of the cover part
and the walls of the box part in a container made
of paperboard or other flexible material has not
heretofore been achieved, particularly where the
container is of the hinged cover type.

In accordance with this invention, cooperating
abutment elements are associated with the front
wall panel of the box part and the front enclos-
ing flange section of the cover part, which are so
formed and proportioned as to provide substan-

tial resistance to opening of the cover part and
which operate to retain the cover part in closed
position even when the container is subjected to
rough handling. The particular means which
accomplish this desirable result in the present in-
vention comprise a hinged abutment flap adapted
to cooperate with a relatively fixed abutment ele-
ment, such as a fixed abutment flap or a pair of
fixed abutment tabs, in a manner to resist in-
advertent opening of the cover of the container.
The hinged abutment flap may be associated
either with the front wall panel of the box part
at its upper edge or with the front flange section
of the cover part. When the front wall panel
of the box part is provided with the hinged abut-
ment flap, the fixed abutment element or flap,
or pair of fixed abutment tabs, is secured to the
inside face of the front flange section or panel of
the cover part. When the front flange section of
the cover part is provided with the hinged abut-
ment flap, a fixed abutment element or flap is
secured to the outside face of the front wall panel
of the box part.

In either circumstance, as to their respective
locations, the hinged and fixed abutment flaps or
tabs are brought into effective abutting engage-
ment when the cover part is in closed position by
first turning the hinged abutment flap out of its
normal plane so that its free edge will meet and
abut the edge of the fixed abutment element,
with the hinged abutment flap and the fixed
abutment element confined between the inner face
of the front flange section of the cover part and
the outer face of the front wall panel of the box
part.

Such confinement of the thus engaged abut-
ment flaps or tabs, when the cover part of the
container is in closed position, serves to maintain
their abutting engagement by resisting the nor-
mal hinging movement of the hinged abutment
flap whereby such engagement would be released.

When the hinged and fixed abutment flaps or
tabs are properly proportioned, as in the manner
more particularly hereinafter described, the cover
part can be swung from its closed position to its
open position only by applying a sufficient up-
ward pressure or pull on the front flange section
of the cover part to overcome the resistance to
the normal hinging movement of the hinged
abutment flap occasioned by its confinement as
described.

When upward pressure or pull is exerted on
the front flange section of the cover part, the
cooperating abutment edges of the fixed abut-
ment element and hinged abutment flap move

into abutment, and the continued upward pressure places compressive stress on the hinged abutment flap during a portion of the swinging movement of the cover part from closed to opened position. This compressive stress is variously transmitted to the enclosing walls or panels of the cover part and/or box part, the material from which the panels are made being sufficiently flexible to permit flexing thereof without rupture of material while the hinged flap is under compressive stress during opening movement of the cover part. One or more of the enclosing walls or panels of the cover part or box part are designed to flex sufficiently to permit such hinging movement of the hinged abutment flap between the inner face of the front flange section of the cover part and the outer face of the front wall panel of the box part, until the abutting engagement of the hinged abutment flap and the fixed abutment element is released, whereupon the cover part springs open.

Hinged cover containers constructed in accordance with this invention provide a packaging medium for numerous articles of merchandise which have heretofore been packaged only in relatively rigid hinged cover containers. The container itself may be made of numerous attractive shapes and forms, and may be made in any length, width or depth desired.

An object of this invention is to provide an improved hinged cover container formed from paperboard or other flexible material, having means associated with the box and cover part thereof to retain the cover part in closed telescoped position over the box part and operative to resist opening movement of the cover part.

Another object of this invention is to provide a container formed from suitably flexible 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 and cover parts adapted to retain the cover part in closed position so as to prevent any undesired opening thereof and which nevertheless may be easily and quickly opened and closed, and which also 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.

A further object of this invention is to provide a structure for forming a reclosable container made of flexible material which is attractive and neat in appearance, strong and sturdy in construction, and serviceable in use, and wherein the cover part may be made to snugly telescope over the box part.

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

Although the characteristic features of this invention which are believed to be novel 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 hereof, in which

Fig. 1 is a perspective view showing the unassembled cover part attached to or forming an integral part of an otherwise fully formed box part;

Fig. 2 is a perspective view of the partially assembled cover part associated with the upper end of a box part;

Fig. 3 is a perspective view of the fully assembled cover part associated with a box part;

Fig. 4 is a perspective view of the cover part as it appears when fully assembled and in closed telescoped position over the upper end of the box part;

Fig. 5 is a vertical cross-sectional view through the filled and closed container as it appears when viewed along line 5-5 of Fig. 4;

Fig. 6 is an enlarged vertical cross-sectional view taken through the cover part and the upper portion of the box part and showing the cover part in partially open position;

Fig. 7 is a perspective view of the container showing a box part having associated therewith an unassembled cover part of somewhat modified construction;

Fig. 8 is a perspective view of the fully formed container showing the cover part of Fig. 7 fully assembled and swung into open position;

Fig. 9 is a perspective view of the fully formed container showing the cover part in closed and telescoped position over the upper end of the box part;

Fig. 10 is a vertical cross-sectional view through the fully assembled and filled container as it appears when viewed along line 10-10 of Fig. 9;

Fig. 11 is an enlarged vertical cross-sectional view through the upper portion of the container showing the cover part in partially open position;

Fig. 12 is a perspective view of a container showing a box part having associated therewith an unassembled cover part of another modified construction;

Fig. 13 is a perspective view of the upper portion of the box part shown in Fig. 12 with the cover part fully assembled and swung into open position;

Fig. 14 is a perspective view of the upper portion of the fully assembled container shown in Fig. 13 with the cover part in closed and telescoped position over the upper end of the box part;

Fig. 15 is an enlarged vertical cross-sectional view through the upper portion of the container as the same appears when viewed along line 15-15 of Fig. 14;

Fig. 16 is a vertical cross-sectional view through the upper portion of the container showing the cover part in partially open position;

Fig. 17 is a perspective view of the upper portion of the fully formed container having a cover part fully assembled from the cover forming elements shown in Fig. 12 but with the securing tabs thereof secured to the inside face of the top wall panel of the cover part and the abutment flap thereof not secured to the inside face of the front flange section, the fixed abutment flap in this instance being associated with the front wall panel of the box part;

Fig. 18 is a perspective view of the upper portion of the container shown in Fig. 17 with the cover part in closed and telescoped position over the upper end of the box part;

Fig. 19 is a vertical cross-sectional view through the upper portion of the container shown in Fig. 18 with the cover part in partially open position;

Fig. 20 is a perspective view of a container showing a fully formed box part and having associated therewith an unassembled cover part of further modified construction;

Fig. 21 is a perspective view of the upper portion of the container shown in Fig. 20 having the abutment flap associated with the cover part folded and secured in position;

Fig. 22 is a perspective view of the upper portion of the container shown in Fig. 21 and illustrates the manner in which the cover part may be assembled;

Fig. 23 is a perspective view of the fully assembled container showing the cover part in closed and telescoped position over the upper end of the box part;

Fig. 24 is a vertical cross-sectional view through the fully assembled container as it appears when viewed along line 24—24 of Fig. 23; and

Fig. 25 is a vertical cross-sectional view through the upper portion of the container shown in Fig. 23 with the cover part in partially open position.

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

In accordance with this invention, the box part *a* of the container may be of any desired shape or size but normally comprises four enclosing walls and a bottom wall, which may be formed and secured together in any desired manner. For the purpose of explanation, however, one of the enclosing panels is designated the front wall panel 1, the opposite enclosing panel is designated rear wall panel 2, and the intermediate enclosing panels as side wall panels 3, all of which are connected by a bottom wall panel 4 forming a containing bottom for the box part. The front, rear and side wall panels of the box part may be of any desired length and width to form a box part of any desired size and proportion. The particular construction of these panels and the bottom panel as well as their manner of assembly may also be varied as desired.

One of the enclosing panels, which will hereinafter be designated the front wall panel 1, is provided with an abutment flap 5 hingedly connected thereto at its upper end 6. The abutment flap 5 may extend substantially the full width of the front wall panel 1 and may, if desired, be provided with mitered ends 7. The abutment flap 5 is provided with an abutment edge 8 which may extend substantially parallel to the top edge of the front wall panel. The abutment edge 8 of flap 5 is designed to cooperate with a complementary abutment edge or edges presented by an abutment flap or abutment tabs associated with the cover part *b* of the container.

The cover part *b* forming a part of the container as illustrated in Figs. 1 to 6 inclusive, comprises a top wall panel 10 which is hinged to the rear wall panel 2 of the box part along a transversely extending or hinge score line 11 which defines the top edge of the rear wall panel. A front panel or flange section 12 is hingedly connected along transversely extending score line 13 to the top wall panel 10. The score line 13 is so positioned as to permit the front flange section 12 to snugly overlies the outside face of the front wall panel 1 of the box part when the cover part, fully assembled, is in closed position. A side wall forming panel or section 14 is hingedly connected to each end of the top wall panel 10 by a score line 15 which is so positioned as to permit each side wall section to snugly overlies the outside face of the adjacent side wall panel 3 of the box part when the cover part is in closed position. Each side wall section 14 is also provided with a securing tab 16 hinged thereto along a transversely extending score line 17. Each of the score lines 17 may be substantially in alignment with the score line 13. Each securing tab 16 is separated as by cut 18 from the adjacent end of the front flange section 12. The securing tabs 16 are so

shaped and proportioned that they may be folded to overlies the respective adjacent ends of the inside face of the front flange section 12.

An abutment flap 19 is hingedly connected by transversely extending score line 20 to the front flange section 12 and is so proportioned that it may be folded so as to overlies and be secured as by adhesive to the inside faces of the securing tabs 16 when they have been folded into position against the front flange section 12, as illustrated in Fig. 3. The abutment flap 19 associated with the cover part is provided with an abutment edge 21 which is adapted to cooperate with the abutment edge 8 of the abutment flap 5 associated with the box part when the cover part is in closed and telescoped position over the box part.

The cover part *b* associated with the container illustrated in Figs. 1 to 6, inclusive, may be summarized as comprising a top wall panel 10 hinged to the upper edge of the rear wall panel 2 of the box part, a front panel or flange section 12, and side wall panels or sections 14 connecting the adjacent ends of the top wall panel 10 and front flange section 12, the parts being so proportioned that the front flange section 10 will snugly telescope over the front wall panel 1 of the box part and the side wall sections 14 will snugly telescope over the side wall panels 3 of the box part. The outer free edge 18 of the side wall sections may be given a rounded or curvilinear contour to enhance the appearance of the assembled container.

An important feature of this invention is the means which are associated with the front wall panel of the box part and the front flange section 12 of the cover part, which are operative to normally retain the cover part in closed position and operative to resist opening movement thereof. A means provided for this purpose is illustrated in Figs. 1 to 6, inclusive, as comprising the abutment flap 19 associated with the front flange section 12 of the cover part and the abutment flap 5 associated with the front wall panel 1 of the box part. Preferably, the longitudinal length *x* of abutment flap 5, as shown in Figs. 1 and 5, is approximately the same as the longitudinal length *y* of the abutment flap 19. The combined longitudinal length *x* and *y* of abutment flaps 5 and 19, however, is preferably one to four thicknesses of the paperboard material less than the longitudinal length *z* of the front flange sections 12 of the cover part. Also, the upper end 6 of the front wall panel 1 of the box part is preferably below the plane of the top wall panel 10 of the cover part, when in closed position, a distance equal to from one to four thicknesses of the paperboard material, and the top edges 9 of the side wall panels 3 may be beveled to coincide. Thus when the cover part is in closed position, as illustrated in Fig. 5, and with the edge 8 of flap 5 in abutment with abutment edge 21 of flap 19, the top wall panel 10 of the cover part will be raised above the top edge of the front wall panel a distance *r*.

The merchandise material or plug *P* may be placed in the box part when the cover part is swung into the open position illustrated in Fig. 3. When the cover part is swung into closed position, the abutment edge 21 of the cover abutment flap 19 will then move under and engage the abutment edge 8 of the box abutment flap 5 after the latter has first been turned downwardly out of its normal plane as shown. By reason of the lowered upper edge 6 of the front wall panel 1 and the beveled upper edges 9 of

the side wall panels 3, the top wall panel 10 of the cover part may be pressed downwardly so as to lie at substantially an acute angle to the rear wall panel 2 of the box part. Since the abutment flaps 5 and 19 have a combined length of x plus y which is less than the comparative length z of the front flange section 12 of the cover part, the abutment edge 21 of the flap 19 is entirely free to swing under and engage the abutment edge 8 of the flap 5 when the top wall panel 10 of the cover part is pressed down so as to engage the upper edge 6 of the front wall panel 1 of the box part. Due to the inherent resiliency of the paperboard material, top wall panel 10 will swing upwardly into position substantially at right angles to the rear wall panel 2 when pressure on the top wall panel 10 is released. When this occurs, abutment edge 21 of flap 19 will engage and abut the abutment edge 8 of the box abutment flap 5.

In the form of the invention illustrated in Figs. 1 to 6, the abutment flap 19 is adhesively secured to the inside faces of the securing tabs 16 as folded to lie against the inside face of the front flange section 12 of the cover part, while the abutment flap 5 is free to hinge or swing along fold line 6 which defines the top edge of the front wall panel 1 of the box part.

When access to the contents of the container as illustrated in Figs. 1 to 6 is desired, upward pressure is exerted on the lower free edge of the front flange section 12 of the cover part. Stresses are thus imposed upon the front wall panel 1 and the rear wall panel 2 of the box part by the thus enforced upward swinging of the abutment flap 5, causing them to bow inwardly as illustrated in Fig. 6. During opening movement the hinged abutment flap 5 is forced to swing upwardly and outwardly while the abutment flap 19 associated with the cover part remains fixed. The hinging abutment flap 5 and the fixed abutment flap 19 are so shaped and proportioned as to impose sufficient stresses upon the front and rear wall panels 1 and 2 of the box part to achieve 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 inadvertently during normal handling of the container.

There is shown in Figs. 7 to 11 inclusive a cover part *b* of somewhat modified construction. In the arrangement here shown, the abutment flap 19 associated with the cover part illustrated in Fig. 1 is eliminated, and the fixed abutment means associated with the cover part is afforded by the securing tabs 25 which are hingedly connected to each side wall section 14 of the cover part. Each tab 25 comprises a main tab portion 25' and an abutment extension 25'' formed by cutting a notch 28 in each of the tabs 25, which notch separates each tab from the adjacent end of the front flange section 12. As thus formed, the main portion 25' of each tab is provided with a beveled inner edge 26 and the abutment extension 25'' is provided with a relatively straight abutment edge 27.

The cover part is assembled by adhesively securing the tabs 25 to the inside face of the front flange section 12 as illustrated in Fig. 8. The longitudinal length y of each abutment extension 25'' is preferably approximately the same as the longitudinal length x of the abutment flap 5 which is free to hinge along the top edge 6 of the front wall panel 1 of the box part. When the cover part is assembled the abutment edges 27 of the abutment extensions 25'' are substan-

tially in alignment so as to be in position to engage the abutment edge 8 of the hinging abutment flap 5 of the box part. Due to the fact that the tabs 25 are adhesively secured to the inside face of the front flange section 12, their abutment extensions 25'' present a relatively fixed abutment edge 27. Each end 7' of the hinging abutment flap 5 is preferably cut on a miter so as to fit between the beveled edges 26 of the tabs 25 of the cover part when the cover part is in closed position and the hinging abutment flap 5 has first been turned outwardly down out of its normal plane as shown.

The merchandise contents may be readily inserted into the container shown in Fig. 8 when the cover part is swung into full open position. Since the length y of the abutment extensions 25'' added to the length x of the hinged abutment flap 5 is less than the comparative length z of the front flange section 12 of the cover part, the abutment edges 27 of the tabs 25 are entirely free to swing under and engage the abutment edge 8 of the hinged abutment flap 5 when the top wall panel 10 of the cover part is pressed so as to engage the top edge 6 of the front wall panel 1 of the box part. Due to the inherent resiliency of the paperboard material, the top wall panel 10 will swing upwardly substantially at right angles to rear wall panel 2 when pressure on the top wall panel 10 is released. When this occurs, abutment edges 27 will engage and abut the abutment edge 8 of the hinged abutment flap 5 as illustrated in Fig. 10.

The cover part may be swung into open position by applying upward pressure to the lower free edge of the front flange 12 of the cover part. As shown in Fig. 11, stresses are thus imposed on the front wall panel 1 and the rear wall panel 2 of the box part, causing them to bow inwardly. The stresses thus engendered resist opening of the cover part and maintain the cover part in partially closed position until sufficient upward force is exerted on the front flange section 12 of the cover part to overcome this resistance. However, only a slight downward force need be exerted on the top wall panel 10 of the cover part to effect closing of the cover part. This resistance to opening continues until the hinged abutment flap 5 extends at substantially an obtuse angle to the front wall panel 1. The hinged abutment flap 5 and the fixed abutment extensions 25'' are so shaped and proportioned as to achieve 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.

There is shown in Fig. 12 a container having an assembled box part *a* and an unassembled cover part *b* of somewhat further modified construction. As shown in Fig. 12, a side wall section 34 is hingedly connected to each end of the front flange section 12 along longitudinally extending score line 35. A securing tab 36 is hingedly connected to each of the side wall sections 34 along a transversely extending score line 37 which is substantially a continuation of the score line 13. A fixed abutment flap 19 is hingedly connected to the front flange section 12 along the transversely extending score line 20. Each side wall section 34 may be provided with a round or arcuate outer edge 38 to enhance the appearance of the container.

The securing tabs 36 may be adhesively secured to the outside face of the top wall panel 10 of the cover part as illustrated in Figs. 13 to

16, inclusive, or the securing tabs 36 may be secured to the inside face of the top wall panel 10 of the cover part as illustrated in Figs. 17 and 19. The cover part is so shaped and proportioned that when the securing tabs 36 are secured to either the inside face or the outside face of top wall panel 10, the front panel or flange section 12 will snugly telescope over the front wall panel 1 of the box part and the side wall panels or sections 34 will snugly telescope over the side wall panels 3 of the box part.

While in the preferred form the abutment element or flap 19 is fixedly secured to the inside face of the front flange section 12 of the cover part and the abutment flap 5 is free to hinge along the top edge of the front wall panel 1 of the box part, as shown in Figs. 13 and 16, it will be appreciated that the objects of this invention may be achieved by fixedly securing the abutment element or flap 5 to the outside face of the front wall panel 1 of the box part and permitting the abutment flap 19 of the cover part to freely hinge along its connected score line 20, as shown in Figs. 17 and 19. In either form, however, the longitudinal length x of the abutment flap 5 is preferably substantially equal to the longitudinal length y of the abutment flap 19 and their combined length x plus y is preferably slightly less by a distance r , Fig. 15, than the longitudinal length z of the front flange section 12 of the cover part.

When the cover part is swung into open position as illustrated in Figs. 13 and 17, the merchandise may be readily inserted into the box part, the cover part may then be swung into closed position with the abutment edge 8 of the box abutment flap 5 abutting the abutment edge 21 of the cover abutment flap 19. By reason of the lowered upper edge 6 of the front wall panel 1 and the beveled upper edges 9 of the side wall panels 3, the top wall panel 10 may be pressed downward so as to lie at substantially an acute angle to the rear wall panel 2 of the box part. Since the abutment flaps 5 and 19 have a combined length which is less than the comparative length z of the front flange section 12 of the cover part, the abutment edge 21 of the flap 19 is entirely free to swing under and engage the abutment edge 8 of the flap 5 when the top wall panel of the cover part is pressed so as to substantially engage the upper edge 6 of the front wall panel 1 of the box part. Due to the inherent resiliency of the flexible material, the top wall panel 10 will swing upwardly into a substantially horizontal position and substantially at right angles to the rear wall panel 2 when pressure on the top wall panel 10 is released. When this occurs, the abutment edge 21 of flap 19 will engage and abut the abutment edge 8 of the flap 5.

In opening the cover part upward pressure is exerted on the lower free edge of the front flange section 12 of the cover part. Stresses are thus imposed upon the front wall panel 1 and rear wall panel 2 of the box part, causing them to bow inwardly. 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 section 12 of the cover part to overcome this resistance. A slight downward force only need be exerted on the top wall panel 10 of the cover part to effect closing of the cover part. In the form of the invention shown in Fig. 16, the hinging abutment flap will resist opening of the cover

part until it extends at substantially an obtuse angle to the front wall panel 1.

In the modification illustrated in Figs. 17, 18 and 19, the abutment flap 5 is fixed as by adhesive to the outside face of the front wall panel 1 of the box part while the abutment flap 19 associated with the cover part is free to hinge about the score line 20. The cover part as illustrated in Fig. 19 may be swung open by exerting upward pressure on the lower free edge of the front flange section 12 of the cover part. Stresses are thereby imposed upon the front wall panel 1 and rear wall panel 2 of the box part, causing them to bow inwardly as illustrated in Fig. 19.

The hinged abutment flap 19 and the fixed abutment flap 5 are so shaped and proportioned as to achieve 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.

Fig. 20 shows a container having an assembled box part and an unassembled cover part of further modified construction. As illustrated in Fig. 20, the top wall panel 10 of the cover part is hingedly connected to the rear wall panel 2 of the box part along the transversely extending score line 11 while the front flange section 12 is hingedly connected along transversely extending score line 13 to the top wall panel 10. An inner side wall forming flap 44 is hingedly connected to each end of the top wall panel 10 along the longitudinally extending score line 45, while a somewhat similar but slightly larger outer side wall forming flap 46 is hingedly connected to the front flange section 12 along a longitudinally extending score line 47. It will be noted that score line 45 at each end of the top wall panel is substantially in alignment with the adjacent score line 47 at the adjacent end of the front flange section 12. The adjacent side wall forming flaps 44 and 46 are separated by a cut 48 substantially in alignment with the score line 13 and each inner side wall forming flap 44 may be provided with an arcuate outer edge 49 which would normally be concealed, upon assembly of the cover part, beneath the corresponding arcuate edge 50 of the slightly larger adjacent side wall forming flap 46. An abutment flap 19 having a free abutment edge 21 is hingedly connected along the transversely extending score line 20 to the front flange section 12.

In assembling the cover part the abutment flap 19 is folded inwardly so as to overlie the inside face of the front flange section 12 as illustrated in Fig. 21. The top wall panel 10 may then be folded downwardly in normally closed position and front flange section 12 folded to overlie the front wall panel 1 of the box part. The inner side wall forming flaps 44 will then be folded downwardly so as to overlie the adjacent side wall panels 3 of the box part as illustrated in Fig. 22, and thereupon the outer side wall forming flaps 46 may be adhesively secured to the adjacent inner side wall forming flaps 44, producing a fully assembled cover part arranged in closed position as illustrated in Figs. 23 and 24.

Upon opening of the cover part the merchandise P may be readily inserted into or removed from the box part. When the cover part is swung into closed position the abutment edge 8 of the abutment flap 5 will be brought into abutment with the abutment edge 21 of the cover abutment flap 19. By reason of the lowered upper edge 6 of the front wall panel 1 and the beveled upper

edges of the side wall panels 3, the top wall panel 10 may be pressed downward so as to lie at substantially an acute angle to the rear wall panel 2 of the box part. In the preferred form as illustrated in Fig. 25, the abutment flap 19 is adhesively secured to the inside face of the front flange section 12 of the cover part and the abutment flap 5 is free to hinge along the upper edge of the front wall panel 1 of the box part. It will be appreciated, however, that the abutment flap 5 may be adhesively secured to the outside face of the front wall panel 1 of the box part and that the abutment flap 19 of the cover part may be left free to hinge along its connecting score line 20. In either form of the invention, however, the longitudinal length x of the abutment flap 5 is preferably substantially equal to the longitudinal length y of the abutment flap 19 and their combined length x plus y is preferably slightly less by a distance r , Fig. 24, than the longitudinal length z of the front flange section 12 of the cover part.

Since the abutment flaps 5 and 19 have a combined length which is less than the comparative length z of the front flange section 12 of the cover part, the abutment edge 21 of the flap 19 is entirely free to swing under and engage the abutment edge 8 of the flap 5 when the top wall panel of the cover part is pressed so as to substantially engage the upper edge 6 of the front wall panel 1 of the box part. Due to the inherent resilience of the flexible material, the top wall panel 10 will swing upwardly substantially at right angles to the rear wall panel 2 when pressure on the top wall panel 10 is released. When this occurs the abutment edge 21 of flap 19 will engage and abut the abutment edge 8 of the flap 5.

By following the teachings of this invention a container may be provided comprising a box part of any desired proportion or size, having associated therewith a cover part hingedly connected to the rear wall panel of the box part and having a front panel or flange section and side wall panels or sections adapted to snugly telescope over the corresponding front wall panel and side wall panels of the box part. The side wall sections of the cover part may be variously secured and attached to the top wall panel and the front flange section to provide a rigid and sturdy telescoping cover. Abutment elements are provided comprising a hinging or resilient abutment flap and a fixed abutment element or flap or fixed abutment tabs carried by the box and cover parts which are operative to cooperate to automatically releasably retain the cover part in closed position and releasably resist opening movement thereof. Where the abutment flap, element, or tabs associated with the cover part are fixedly secured to the inside face of the flange section of the cover part, the abutment flap associated with the corresponding wall panel of the box part is so formed as to hinge freely along the upper edge of the front wall panel. Where the abutment element or flap associated with the box part is fixedly secured to the front wall panel thereof, the abutment flap associated with the cover part is so formed as to permit free hinging movement thereof along the lower edge of the front flange section of the cover part. The cover front panel or flange section and the cover side panels or sections are held in substantially right angular relationship to the top wall panel so that the cover part will snugly telescope over the corresponding enclosing panels of the box

part. When the cover part is in closed position, the abutment elements are wholly contained within the cover part, with the abutment element associated with the box panel overlying the outside face thereof and the abutment element associated with the corresponding cover panel overlying the inside face thereof, and with the cooperating abutment edges of the abutment elements disposed in adjacent position and extending substantially along the mid sectional area of the cover panel which encloses the abutment elements. As thus arranged it will be noted that the abutment element associated with the box part presents a downwardly facing abutment edge and the abutment element associated with the cover part presents an upwardly facing abutment edge.

When the box part and associated cover part have been thus constructed, the cooperating abutment elements operate to automatically releasably retain the cover part in closed position and releasably resist opening movement thereof. Opening movement of the cover part may be effected by applying a predetermined upward force to the front flange or panel thereof, opening movement being resisted until the cover part has been forcibly swung a predetermined distance from closed toward open position. During this predetermined movement, the cooperating abutment edges of the hinged abutment flap and the fixed abutment element move into abutment and compressive stress is imposed on the hinged abutment flap which is in turn transmitted to one or more of the enclosing panels of the box part and cover part, causing one or more of these panels to flex sufficiently to permit the hinged abutment flap to continue its hinging movement until the cover part is released. Thus the cover part can only be opened by applying force to the front flange section of the cover part sufficient to overcome the resistance offered by the hinged abutment flap and the fixed abutment flap. When the cover part has been brought to fully closed position the abutment flaps will automatically releasably lock the cover part in closed position as will be readily noticeable by release of the resistance to closing and the "click" sound which results.

Paperboard containers and containers made of other suitable resilient material equipped with this improved cover part hinged to the rear wall panel of a box part having an abutment flap associated with the front wall panel thereof, are adapted for the packaging of numerous articles of merchandise which have heretofore been packaged in metal or other rigid hinged cover containers. The cover part may be made in any desired shape and form to accommodate the shape and form of the box part, is neat and attractive in appearance, and strong and serviceable in use.

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 formed from paperboard material comprising, a box part defined by a front wall panel, a rear wall panel and intermediate side wall panels connecting said front and rear wall panels, a bottom wall panel forming an end closure for said box part, the upper end of the box part being open, and

an abutment flap connected to said front wall panel adjacent said open end, and a cover part for said open end comprising a top wall panel hingedly connected to the upper end of the rear wall panel of the box part, a front flange section connected to said top wall panel adapted to telescope over the front wall panel and abutment flap of the box part, and side wall sections relatively rigidly connected to the adjacent ends of said top wall panel and front flange section adapted to telescope over the intermediate side wall panels of the box part, and an abutment flap extending along the inner surface of said front flange section and adjacent to the free edge thereof, the lower edge of said first named flap and the upper edge of said second named flap being substantially in abutting position when the cover part is in normally closed position, one of said abutment flaps being fixed in position and the other of said abutment flaps being hinged and free to execute a hinging or swinging movement, said abutment flaps being operative to cooperate to automatically releasably retain the cover part in closed position and releasably resist opening movement thereof.

2. An improved hinged cover container comprising, a box part having enclosing side panels and an open end, a cover part for said open end having an end wall panel hingedly connected to one of the box side panels and connected cover side panels joined to said end wall panel adapted to telescope over other of the box side panels, and 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 strip fixed to the inside face of a side panel of the cover part, said other abutment element comprising a free swing flap hinged along an edge thereof to the adjacent side panel of the box part and overlying the outside face and adjacent the open end thereof, said fixed strip and hinged flap being automatically operative to releasably retain the cover part in closed position and to releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward open position, said hinged flap having a free abutment edge arranged to move into abutment with an abutment edge of said fixed strip and maintain compressive stress on said hinged flap during said predetermined swinging movement of the cover part from closed to open position, the material forming certain of said side panels being sufficiently flexible to permit flexing thereof without rupture of the material while said hinged flap is under compressive stress during opening movement of the cover part.

3. An improved hinged cover container comprising, a box part having enclosing side panels and an open end, a cover part for said open end having an end wall panel hingedly connected to one of the box side panels and connected cover side panels joined to said end wall panel adapted to telescope over other of the box side panels, and 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 free swinging flap hinged along one edge thereof to a side panel of the cover part and normally overlying the inside face thereof, said other abutment element being fixed to the outside face of the adjacent

side panel of the box part adjacent the open end thereof, said abutment elements being automatically operative to releasably retain the cover part in closed position and to releasably resist opening movement of the cover part until said cover part has been forcibly swung a predetermined distance from closed toward open position, said hinged abutment flap having a free 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 open position, the material forming certain of said side panels being sufficiently flexible to permit flexing thereof without rupture of the material while said hinged flap is under compressive stress during opening movement of the cover part.

4. An improved hinged cover container comprising, a box part defined by enclosing side panels and an open end, and a cover part for said open end having an end wall panel hingedly connected to one of the box side panels and connected cover side panels rigidly joined to said end wall panel adapted to telescope over other adjacent box side panels, a pair of abutment tabs fixed to the inside face of the cover side panel which is opposite the hinged edge of said top wall panel, and a free swinging abutment flap hingedly connected to the adjacent box side panel and normally overlying the outside face thereof, said fixed abutment tabs and hinged abutment flap being automatically operative to releasably retain the cover part in closed position and releasably resist opening movement thereof, said fixed abutment tabs and said hinged flap being substantially wholly contained within said cover part when the cover part is in closed position, said tabs and flap having abutment edges associated therewith arranged to move into abutment and maintain compressive stress on said hinged flap during a portion of the swinging movement of the cover part from closed to open position, the material forming at least one of said side panels being sufficiently flexible to permit flexing thereof without rupture of the material while said hinged flap is under compressive stress during a portion of the swinging movement of the cover part from closed to open position.

5. An improved hinged cover container formed from paperboard material comprising, a box part having front, rear and intermediate side panels and an open end, and a cover part for said open end having an end wall panel hingedly connected along a hinge line to the rear wall panel of the box part, a cover front panel connected to said end wall panel and adapted to telescope over the box front panel, a cover side panel connected to each end of said cover front panel and to the adjacent end of said end wall panel and adapted to telescope over the adjacent box side panel, an abutment element adjacent to the open end of the box part connected to and supported by the box front panel and extending along the outside face thereof, and an abutment element connected to and supported by the adjacent cover front panel and extending along the inside face thereof, said abutment elements being substantially wholly contained within the cover part when the cover part is in closed position and being operative to automatically releasably retain the cover part in closed position and releasably resist opening movement thereof, one of said abutment elements comprising a hinged flap having an abutment edge arranged to move into abutment with

an abutment edge of said other abutment element and maintain compressive stress on said hinged flap during a portion of the swinging movement of the cover part from closed to open position, the material forming at least one of said front wall panels being sufficiently flexible to permit flexing thereof without rupture of the material while said hinged flap is under compressive stress during opening movement of the cover part.

6. An improved hinged cover container formed from paperboard material comprising, a box part having front, rear and intermediate side panels and an open end, a cover part for said open end having an end wall panel hingedly connected to the rear wall panel of the box part, a cover front panel connected to the end wall panel and adapted to telescope over the box front panel, intermediate side sections connected to the ends of said end wall panel and front wall panel and adapted to telescope over the box side panels, an abutment flap adjacent to the open end of the box part connected to and supported by the box front panel and extending along the outside face thereof, and an abutment flap connected to and supported by the adjacent cover front panel and extending along the inside face thereof, said abutment flaps being substantially wholly contained within the cover part when the cover part is in closed position and being operative to automatically releasably resist opening movement thereof, one of said abutment flaps being hinged and having an abutment edge arranged to move into abutment with an abutment edge of said other abutment flap and maintain compressive stress on said hinged flap during a portion of the swinging movement of the cover part from closed to open position, the material forming at least one of said front wall panels being sufficiently flexible to permit flexing thereof without rupture of the material while said hinged flap is under compressive stress during opening movement of the cover part.

7. An improved hinged cover container comprising a box part having enclosing side panels and an open end, a cover part for said open end having an end wall panel hingedly connected along one of its edges to the upper edge of one of the box side panels, and connected cover side panels joined to the remaining edges of said end wall panel, said cover side panels being adapted to telescope over the upper ends of the other corresponding box side panels when said cover part is swung into box closing position, an element having an abutment edge extending along its lower end secured to the upper outside edge of one of said other box side panels, and an element having an abutment edge extending along its upper edge secured to the lower inside edge of the adjacent corresponding cover side panel, said abutment elements being substantially wholly contained within the cover part when the cover part is in closed position and being operative to automatically releasably resist opening movement thereof, one of said abutment elements comprising a hinged flap having its abutment edge arranged to move into abutment with the abutment edge of said other abutment element when the cover part is in closed position and maintain compressive stress on said hinged flap during a portion of the swinging movement of the cover part from closed to open position, the panels to which said abutment elements are attached being sufficiently flexible to permit flexing thereof without rupture while said hinged

flap is under compressive stress during opening hinging movement of the cover part.

8. A structure for forming a reclosable container, said structure including an open-ended box part, polygonal in horizontal cross-section and having flexible walls, which include a front panel and a back panel, a cover part for said open end comprising a top wall panel hingedly connected to the upper edge of the back panel of the box part along a fold line, said top wall panel having the dimensions of the open end of the 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, one of said cover panels having hingedly connected thereto at the ends thereof flaps forming cover side panels, said flaps having means 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 inner 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 outer upper edge of a 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.

9. A structure for forming a reclosable container, said structure including an open-ended box part, polygonal in horizontal cross-section and having flexible walls which include a front panel and a back panel, a cover part for said open end comprising a top wall panel hingedly connected to the upper edge of the back panel of the box part along a fold line, said top wall panel having the dimensions of the open end of the 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, one of said cover panels having hingedly connected thereto at the ends thereof flaps forming cover side panels, said flaps having means 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 a flap of less width than said cover front panel articulated to the inner 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 flap of less width than said cover front panel articulated to the outer upper edge of a front panel of the box part for presenting a downwardly facing abutment edge, one of said flaps being secured in face-to-face relation with the front panel to which it is attached, the other of said flaps being hingedly and swingably secured to the front panel to which it is attached, the combined width of said flaps being not greater than the width of said cover front panel.

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