

July 3, 1951

F. L. RUSHING ET AL

2,559,320

CONTAINER HAVING COVER LOCKING MEANS

Filed March 14, 1946

2 Sheets-Sheet 1

FIG. I.

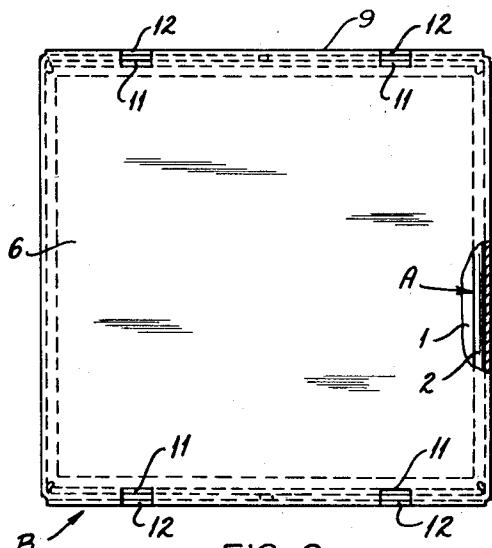


FIG. 2.

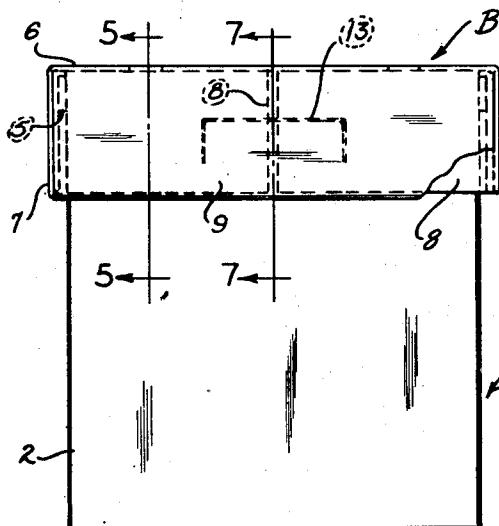


FIG. 3.

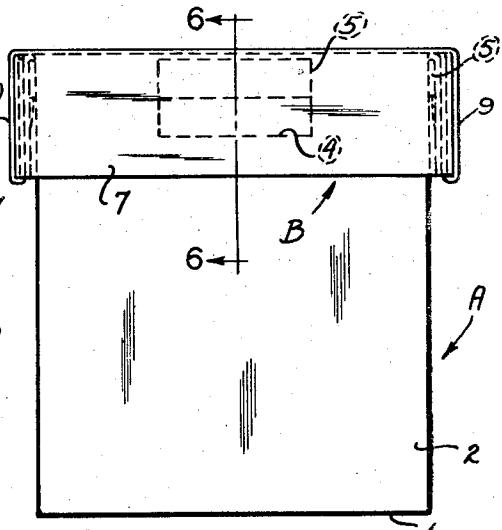


FIG. 5

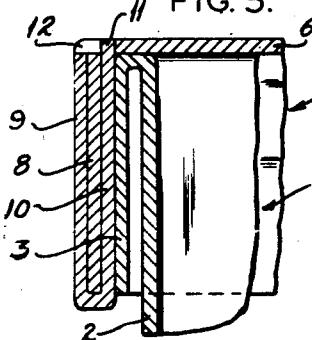
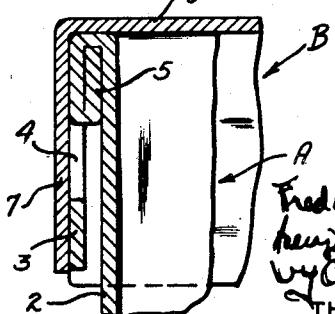


FIG. 6.



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FIG. 8.

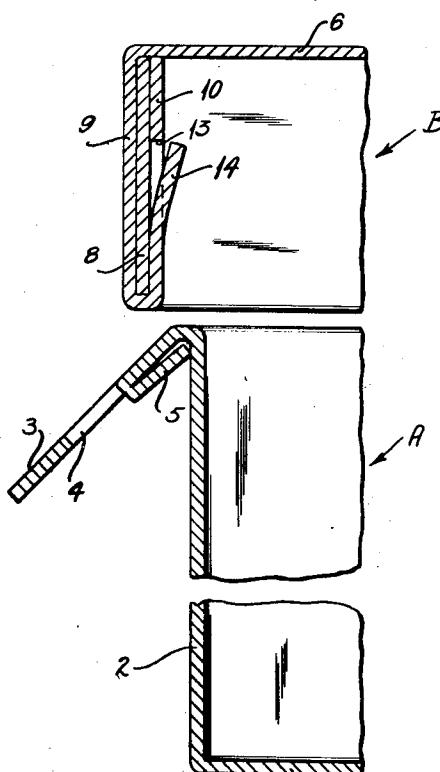


FIG. 10.

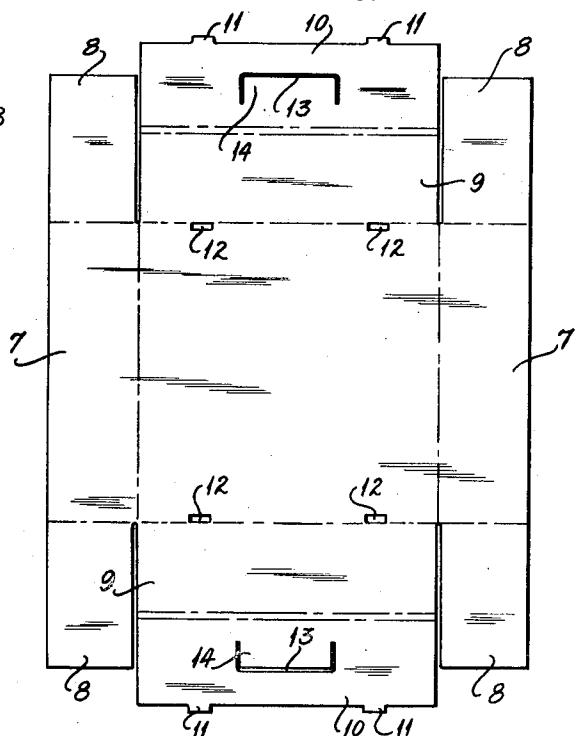


FIG. 9.

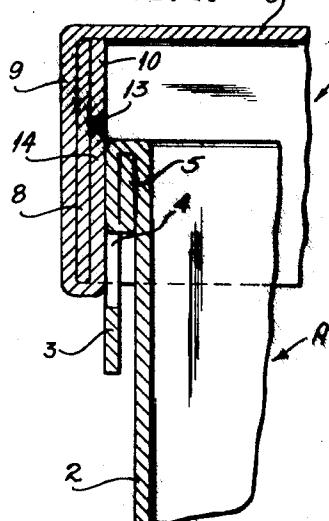


FIG. 11.

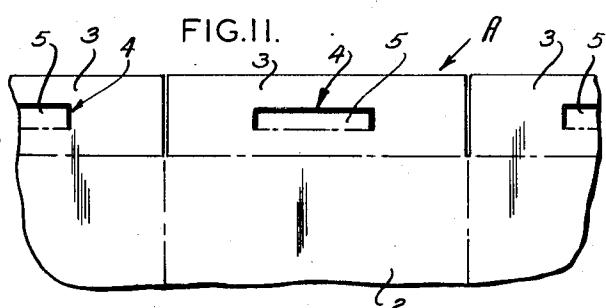
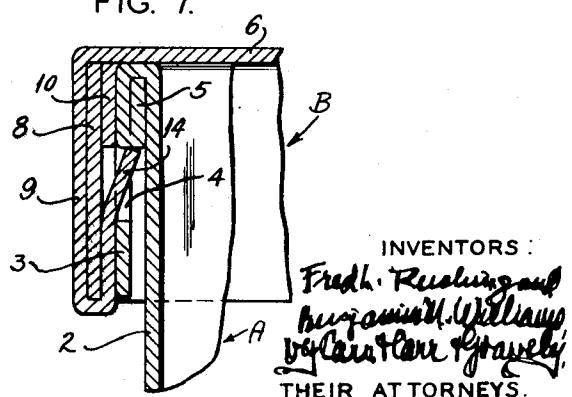


FIG. 7.



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UNITED STATES PATENT OFFICE

2,559,320

CONTAINER HAVING COVER LOCKING MEANS

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Application March 14, 1946, Serial No. 654,420

2 Claims. (Cl. 229—43)

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This invention relates to containers, particularly folded-blank cartons of the kind comprising a body and a slip cover therefor. The principal object of the present invention is to provide for automatically locking the slip cover to the body without the use of separate fastening members and to provide for quickly and easily releasing the automatic cover locking means. Other objects are simplicity and cheapness of construction and compactness of design. The invention consists in the carton and in the construction, combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification and wherein like symbols refer to like parts wherever they occur,

Fig. 1 is a plan view of a carton embodying our invention, a portion of the cover being shown broken away,

Figs. 2 and 3 are side elevational views of the 20 carton,

Fig. 4 is a perspective view thereof,

Fig. 5 is an enlarged fragmentary vertical sectional view on the line 5—5 in Fig. 2,

Fig. 6 is an enlarged fragmentary vertical sectional view on the line 6—6 in Fig. 3,

Fig. 7 is an enlarged fragmentary vertical sectional view on the line 7—7 in Fig. 2,

Fig. 8 is a view similar to Fig. 7, showing the cover detached from the body,

Fig. 9 is a similar view, showing the cover before it is fully seated on the body,

Fig. 10 is a plan view of the blank from which the cover is formed; and

Fig. 11 is a plan view of a portion of the blank from which the body is formed.

In the accompanying drawings, our invention is shown embodied in a shipping carton comprising a tubular body A and a slip cover B therefor, both made of folded-blanks of corrugated board, fiberboard or other bendable material. The body A of the carton comprises a rectangular bottom 1 and four side walls 2 with upper marginal flaps 3. These flaps preferably extend from end to end of the side walls 2 and are adapted to be bent or folded downwardly along the outside faces thereof. The flaps 3 have horizontally elongated rectangular openings 4 cut therein substantially midway between the top and bottom edges thereof. The cuts which define the upper edges of the openings 4 in the flaps 3 extend only partway through the thickness thereof, so as to provide hinged tabs 5 along the upper edge of said openings.

The slip cover B preferably comprises a rec-

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tangular top 6 having a rim including two depending opposite side panels 7 with inwardly bent end flaps 8, and two depending opposite side panels 9 that lie against the outside faces of said end flaps and have upturned lower marginal flaps 10 that lie against the inside faces thereof. As shown in the drawings, the upturned marginal flaps 10 have lugs 11 on the upper edges thereof that fit in vertical openings 12 provided therefor in the top panel 6 of the cover B and serve to lock said flaps in place.

The upturned lower marginal flaps 10 of the side panels 9 of the cover B are slit and cut, as at 13, to provide partly detached upstanding tongues or tabs 14 thereon. The locking tongues 14 are sprung out of the plane of the flaps 10 into an upwardly and inwardly inclined position when said flaps are bent upwardly around the lower edges of the end flaps 8 and locked into position against the inside faces thereof. In this position of the locking flaps 10, the upper edges thereof are offset inwardly on the inside faces of the upturned lower marginal flaps 10 and form horizontal ledges or shoulders thereon.

In the uncovered position of the body A, the flaps 3 along the upper marginal edges of the side walls thereof incline outwardly and downwardly and the tabs 5 hinged to the upper edges of the openings 4 in said flaps are bent upwardly on the inner sides thereof. The slip cover B is applied to the body A by telescoping it over the downwardly and outwardly inclined upper marginal flaps 3 so as to force said flaps to swing downwardly and inwardly alongside the side walls 2 of said body with the upturned tabs 5 clamped between said side walls and their down-turned flaps. During this operation, the inwardly and upwardly inclined locking tongues 14 on the inner faces of the upturned rim flaps 10 of the cover B slide downwardly along the outer faces of the corresponding body flaps 3 and then snap into the openings 4 therein and thus automatically lock said cover to the body A. In the seated position of the cover B, the locking tongues 14 on two opposite sides thereof extend into the openings 4 in the flaps 3 on the corresponding sides of the body A with the upper edges of said locking tongues in abutting relation to the upper edges of said openings, thus preventing removal of said cover from said body. When it is desired to remove the cover B to inspect or remove the contents of the carton, the fingers are preferably slipped upwardly between the upturned rim flaps 10 of the cover and the adjacent body flaps 3 and the completely concealed locking tongues 14

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are pressed outwardly clear of the opening 4 in said body flaps into the plane of said rim flaps, thereby permitting the cover to be lifted off the body A. The cover may also be unlocked by slipping the fingers upwardly between side walls 2 of the body and the flaps 3 thereof and forcing the locking tongues 14 out of the openings 4 in said flaps. The upturned tabs 5 along the upper edges of the openings 4 in the downturned body flaps 3 serve to strengthen and stiffen the carton above said openings and to prevent the locking tongues 14 from sliding upwardly between said flaps and the side walls 2 of the body; and said tabs also serve to space said flaps from said side walls below said openings and thus provide spaces for the fingers when they are inserted between the side walls of the body flaps to disengage said locking tongues.

Obviously, the hereinbefore described construction admits of considerable modification without departing from the invention. Therefore, we do not wish to be limited to the precise construction shown and described.

What we claim is:

1. A carton comprising a body and a slip cover 2
therefor, said body including side walls having
upper marginal flaps folded downwardly on the
outer sides thereof and said slip cover including
depending side panels with lower marginal flaps
folded upwardly on the inner sides thereof and 3
adapted, when said cover is closed, to cover said
upper marginal flaps, said downwardly folded
upper marginal flaps having openings there-
through, said upwardly folded lower marginal
flaps having spring locking tongues that incline 33
upwardly and inwardly from the body opposing
faces thereof and are adapted, when the cover is
closed, to snap into said openings with their
upper ends parallel and in abutting relation to

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the upper edges thereof and are adapted to be disengaged from said openings by inserting the fingers upwardly between said lower and upper marginal flaps or between the latter and said side walls and pressing outwardly on said tongues, said downwardly folded upper marginal flaps having tabs that are folded upwardly from the upper edges of the openings therein between said flaps and the side walls of said body and serve to space said flaps from said side walls and provide finger space therebetween below said openings and to increase the thickness of said flaps along the upper edges of their tongue receiving openings.

15 2. The combination set forth in claim 1 where-
in said locking tongues are struck from said up-
wardly folded lower marginal flaps of said side
panels of said cover and said depending side
panels completely cover and conceal said locking
tongues and the openings engaged thereby when
the cover is closed.

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