

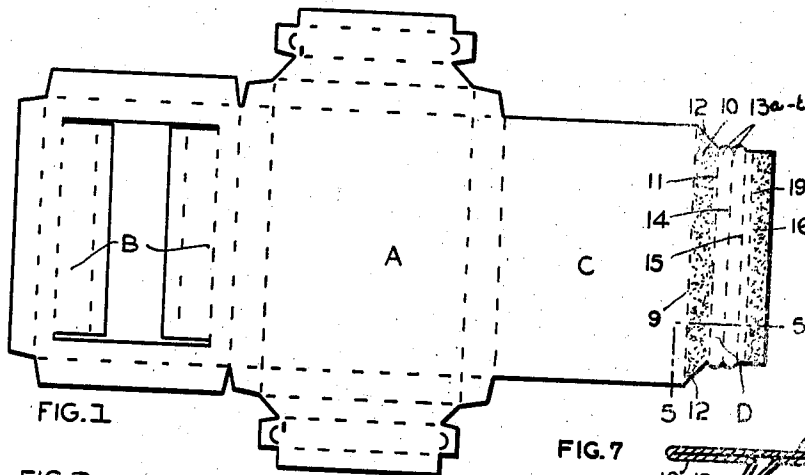
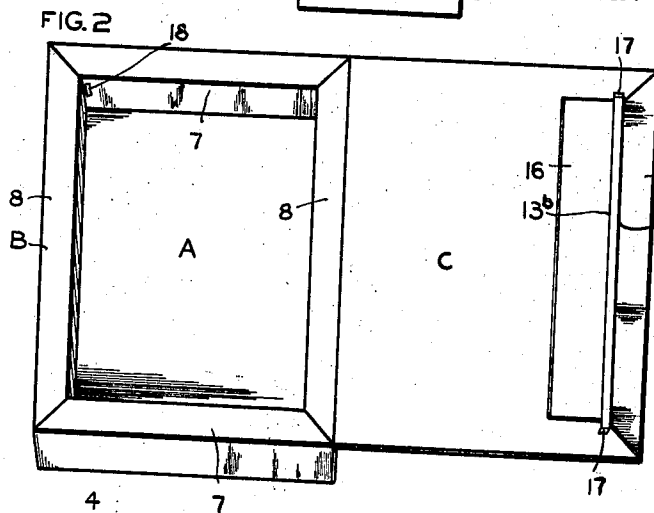
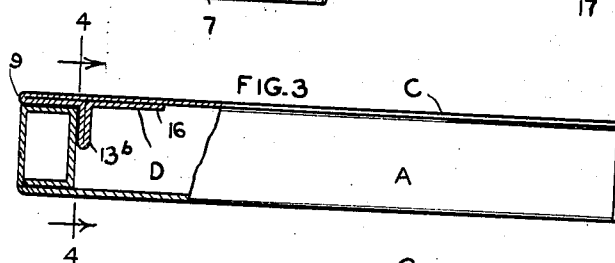
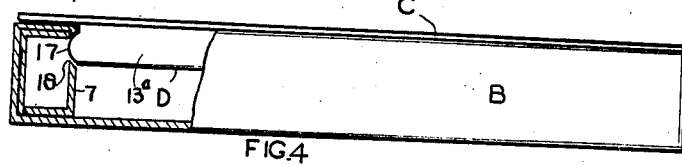
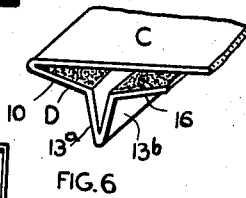
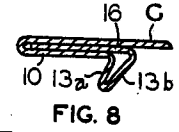
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CARTON

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CARTON

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2 Claims. (Cl. 229—36)

The present invention relates to cartons, and more specifically, to the means of locking the lid of such cartons to the body thereof.

In cartons constructed from a single blank of cardboard and set up or erected without the use of fasteners of any kind, it has been found difficult, without undue complications, to provide a foldable lid which will remain secure in closed position. Another difficulty with such cartons resides in the provision of holding means for the cover which will not be bulky and, at the same time, be integral with the carton. In the means I have conceived as the basis of the present invention, these drawbacks or difficulties have been surmounted not only in single blank cartons and consequently:

The main objects of the invention are, to provide a carton having a lid foldable over its walls with means which may or may not be integral with said lid to secure the same to the wall or body of the carton, and to provide such means which are easily and economically set up, and which are especially adapted for cartons shipped or stored in the flat.

Other objects, as well as many advantages, of my invention will appear in the following description of the preferred embodiment thereof as illustrated in the drawing appended hereto.

In the drawing,

Figure 1 is a plan view of a blank stamped out of cardboard or other material as required, to erect a carton incorporating the present invention;

Figure 2 is a view of the carton completely erected;

Figure 3 is an end view of Figure 2 partly broken away to show detail of the cover locking means;

Figure 4 is a front view of the erected carton, part of it being shown in section as seen from line 4—4 of Figure 3;

Figure 5 is an enlarged view of that section enclosed in lines 5—5 of Figure 1;

Figure 6 is a perspective view of the same section showing one manner in which it is folded;

Figure 7 is a sectional view of the preferred form of the locking means, and

Figure 8 is a similar view showing the preferred arrangement for gluing.

Similar reference numerals denote identical parts in all the figures.

The carton described in the present specification has been selected as suitably adapted to the invention, and made from a single blank comprising body sections A and B, which sections when erected together form the body of the carton as shown in Figure 2, having hollow end walls 7 and side walls 8.

Section C, is intended for the cover or lid, and is a continuation of one of the walls, somewhat enlarged by adding section D to it, to form the locking means, defined by a crease 9 opposite and parallel to the said wall.

Section D comprises first, a strip 10 lying between creases 9 and 11, equal in width to the width of one of the hollow walls of the carton and having angularly cut edges 12 reducing its length to that of the inside length of the carton in a line corresponding to crease 11. Following crease 11 and pleat forming sections 13a and 13b defined by two more creases 14 and 15, section D terminating in a comparatively broad strip 16 having a length equal to the internal length of the body of the carton. In setting up for use, section D is folded on crease 9, then pleated on creases 11, 14 and 15 to form a rigid tongue of double thickness of cardboard extending either at right angle or at some substantial angle to the lid as seen in Figures 3, 7 and 8. Portions 12 and 16 are secured to the underside of the lid or cover resulting in the arrangements shown.

Portions 13a and 13b may have congruent rounded ends 17 as shown in Figure 5 resulting in their being slightly longer than the inside length of the carton, that is, in distance from one side wall to the other, and the inner side of walls 7 are practised small dents or depressions so located that, when the lid is closed, rounded ends 17 will engage therewith. This means will securely hold the lid to the body and a certain amount of prying will have to be resorted to in order to open the same. However, such opening and closing will not strain the carton to an extent that would damage the same. This engagement provides security in addition to friction caused by contact of the tongue formed by sections 13a and 13b with the inside of the adjacent wall.

Where the holding of the cover to the carton need be only slight, rounded edges 17, as well as depressions 18, may be dispensed with and portions 13a and 13b made just long enough to tightly slide between the walls 7.

In order to enhance friction of the tongue formed by sections 13a and 13b, and to permit the tongue to be folded flat for shipping, it is preferably set up in the manner shown in Figures 7 and 8. It will be seen that section 13a which is closer to the adjacent carton wall is of less extent than that of 13b with the result that a space is provided between their base and an angle is formed towards the edge of the lid or towards the wall.

In Figure 7, portion 16 is fastened rearwardly to the underside of the lid but to simplify the set

up when adhesive means are employed the arrangement shown in Figure 8 is preferable. In the latter case portion 16 is folded back and glued between the lid and portion 10 as shown. The construction illustrated in Figures 7 and 8 gives a certain amount of flexibility to the tongue directed towards the wall so that it may be folded flat to the underside of the cover for storing and shipping in knocked down form.

Although reference is made to the length of the carton insofar as the fitting of the retaining means is concerned, it must be understood that this applies to the illustration in which the carton is longer than wide with reference to the manner in which the cover is folded down, but that this reference may as well apply to the width of the package when the lid is adapted to fold over across the width of same. It is notable also that this locking means may be employed on more than one or on all sides of a lid when so desired.

It must also be understood that changes may be made in the means of locking the lid described in order to agree and properly function with carton bodies and different shapes and types, so long as these changes will fall within the spirit of my invention and scope of my claims.

I claim:

1. A carton comprising an open top body formed of a flat bottom wall, hollow side, front

and rear end walls, and a closure hingedly connected with said rear end wall, said cover including an integral depending part disposed in inwardly spaced parallel relation with respect to the forward edge thereof and of less length than the width of said cover whereby the opposite ends of said depending part will be disposed closely adjacent the inner portions of said side walls, said inner portions of said side walls having openings confronting the ends of said depending part, and locking tongues carried by the ends of said depending part engageable in said openings to hold the cover in closed position.

2. A carton comprising an open top body formed of a flat bottom wall, hollow side, front and rear end walls, and a closure hingedly connected with said rear end walls, said cover including an inwardly folded part extended from the forward edge thereof, said folded part including a depending intermediate retaining tongue engageable at its forward face against the inner side of said forward wall, the inner sides of said side walls having recesses confronting the ends of said depending tongue, and projecting locking tongues extending from the ends of said retaining tongue engageable in said recesses for locking said cover in closed position.

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