

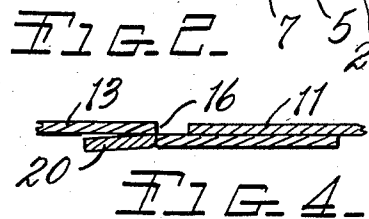
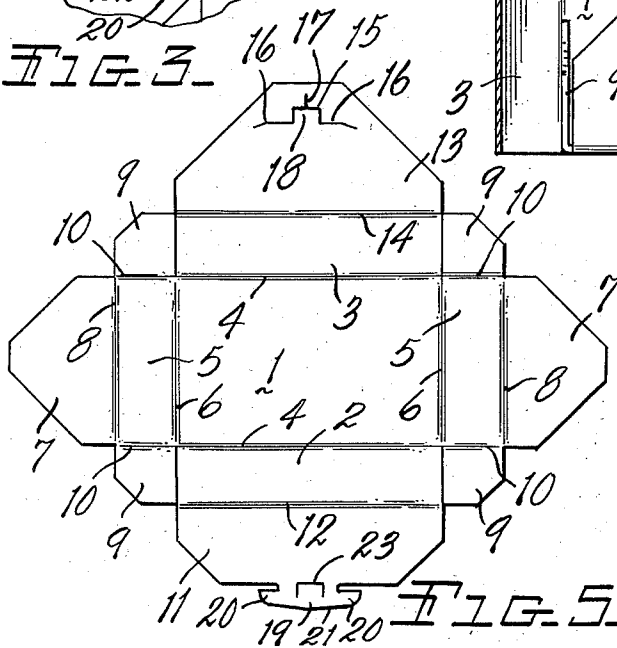
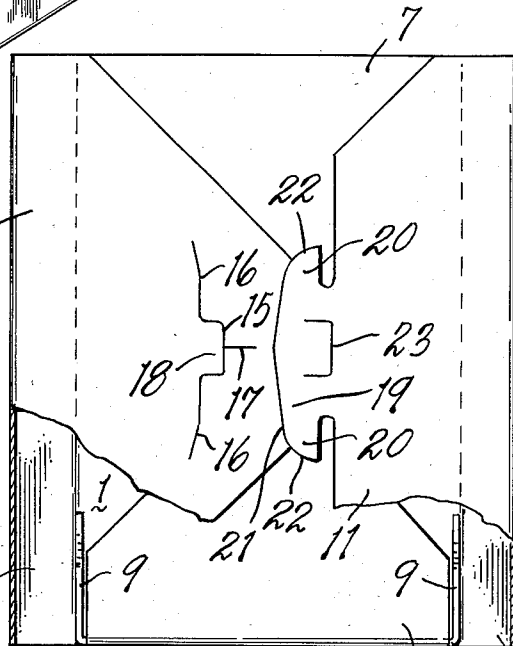
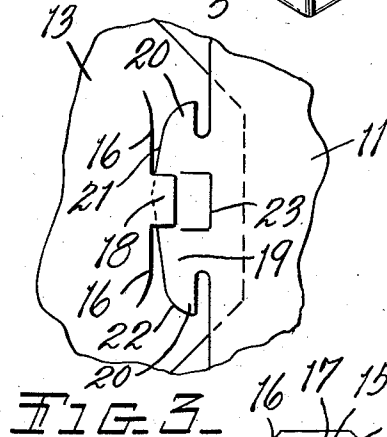
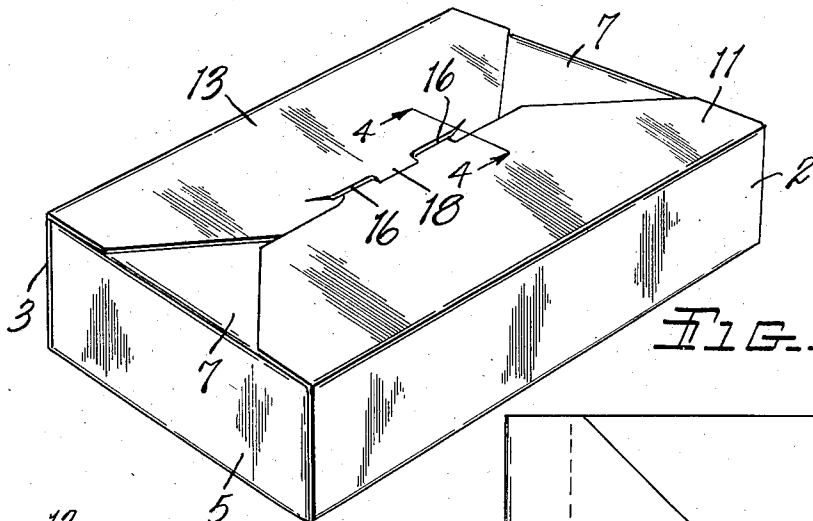
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2,898,028

CARTON

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2,898,028

CARTON

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5 Claims. (Cl. 229—36)

This invention relates to cartons having opposed interlocking members such for example as closure members. The main objects of this invention are:

First, to provide a carton having coengaging members such as cover members which may be quickly engaged and at the same time are securely retained in engagement.

Second, to provide interlocking elements and coacting container members which may be engaged by combined pressure and thrust movement on the coengaging parts and when so engaged are securely retained, yet may be separated or disengaged should occasion require, and re-engaged.

Third, to provide a structure having these advantages which may be formed by relatively simple cutting and scoring means.

Objects pertaining to details and economies of the invention will appear from the description to follow. The invention is defined in the claims.

A structure which embodies the features of the invention is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of a carton embodying the invention in closed position.

Fig. 2 is a fragmentary plan view illustrating an initial step or positioning of the parts to be engaged.

Fig. 3 is a fragmentary view illustrating a succeeding step or positioning of the coengaging parts.

Fig. 4 is an enlarged fragmentary view in section on a line corresponding to line 4—4 of Fig. 1.

Fig. 5 is a plan view of the blank.

In the embodiment illustrated the interlocking parts are closure members. Referring to the drawing, the cut and scored blank illustrated in Fig. 5 is formed of a suitable grade of paperboard stock and comprises a bottom 1, side walls 2 and 3 hingedly secured thereto by the scores 4 and end walls 5 hingedly secured to the bottom score lines 6. The end walls 5 are provided with closure members 7 hingedly secured to the upper edges thereof by score lines 8. The end walls have corner flaps 9 hingedly secured to the ends thereof by scores 10. In using the terms "side" and "end" walls it will be understood that these terms do not refer to or are not limited to dimensions but are used to facilitate description.

The side wall 2 is provided with an outer closure member 11 hingedly connected thereto by the hinging score 12 while the side wall 3 is provided with an inner closure member 13 hingedly connected thereto by the score 14. Again, the terms "inner" and "outer" closure member are used because portions of the closure member 11 overlies or lap a portion of the closure member 13 when the parts are in interlocking engagement. The inner closure member 13 is provided with a main slit extending transversely thereof in spaced relation to its swinging edge and comprises a rearwardly facing U-shaped central portion 15 and laterally extending portions 16 extending from the inner ends of the arms of the U-shaped portion. An auxiliary slit 17 extends forwardly from the bight portion

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of the U-shaped portion. This U-shaped portion defines a forwardly projecting tab 18.

The slit 17 facilitates the deflecting of the portions of the inner member at the front of the slits to receive the T-shaped tongue 19 on the closure member 11 which is disposed in alignment with the slit in the closure member 13. This T-shaped tongue provides or results in opposed laterally and oppositely projecting portions 20 which are peripherally angled as illustrated when the tongue is inserted through the slit. The forward edge 21 of the tongue is bowed and curved at 22 to provide curved ends for the tabs 20, facilitating their entrance into the slit of the inner member, that is, this curving results in a camming engagement as the parts are pressed together after the tip of the tongue is positioned at the inner side of the tab 18 as illustrated in Fig. 3.

The tongue 19 is provided with a U-shaped slit 23 disposed centrally thereof and dimensioned to receive the tab 18 as illustrated in Fig. 1, the portion of the tongue defined by the U-shaped slit 23 being readily deflected inwardly to permit the entrance of the tongue 18 into the slit. With the parts thus engaged they are very securely retained and the interlocked parts are supported against lateral and substantial twisting movement; at the same time they may be quite easily disengaged and reengaged. This is important as it enables the use of the cartons for food products and the like where it may be desirable to open and reclose in the event the contents are not all used at one time.

I have illustrated and described the invention in a highly practical embodiment thereof and, as stated, in this embodiment the interlocking parts are closure members but the interlocking parts may be adapted to other parts of a carton. It is believed that this disclosure will enable the embodiment or adaptation of the invention as may be desired.

Having thus described the invention what I claim as new and desire to secure by Letters Patent is:

1. A carton comprising a pair of opposed relatively swingable and bendable members having outer end portions which overlap when the members are in closed position, the inner of said members having a main slit extending transversely thereof in spaced relation to its swinging edge and comprising a rearwardly facing U-shaped central portion defining a forwardly projecting tab and aligned angled portions extending laterally from the inner ends of the arms of the U-shaped portion of the slit, said inner member also having an auxiliary slit extending from the bight portion of said U-shaped portion of said main slit toward the swinging edge of said inner member to facilitate the flexing of the inner member at the front of said main slit therein, the outer member having a tongue on its swinging edge insertable through said slit in said inner member and having oppositely and laterally projecting locking tabs engageable with the edges of said laterally projecting portions of said main slit in said inner member, the front edge of said tongue being forwardly bowed providing a central tip and forwardly curved ends for said tab members thereof, said tongue having a forwardly facing U-shaped slit disposed centrally thereof defining a deflectable portion aligned with and adapted to receive said tab portion of said inner member when the said tongue of said outer member is inserted in said main slit in said inner member.

2. A carton comprising a pair of opposed relatively swingable and bendable members having outer end portions which overlap when the members are in closed position, the inner of said members having a main slit extending transversely thereof in spaced relation to its swinging edge and comprising a rearwardly facing U-shaped central portion defining a forwardly projecting tab and aligned portions extending laterally from the

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arms of the U-shaped portion of the slit, said inner member also having an auxiliary slit extending from the bight portion of said U-shaped portion of said main slit toward the swinging edge of said inner member to facilitate the flexing of the inner member at the front of said main slit therein, the outer member having a tongue on its swinging edge insertable through said slit in said inner member and having oppositely and laterally projecting locking tabs engageable with the edges of said laterally projecting portions of said main slit in said inner member, said tongue having a forwardly facing U-shaped slit disposed centrally thereof defining a deflectable portion aligned with and adapted to receive said tab portion of said inner member when the said tongue of said outer member is inserted in said main slit in said inner member.

3. A carton comprising a pair of opposed relatively swingable and bendable members having outer end portions which overlap when the members are in closed position, the inner of said members having a slit extending transversely thereof in spaced relation to its swinging edge and comprising a rearwardly facing U-shaped portion defining a forwardly projecting tab and aligned angled portions extending laterally from the inner ends of the arms of the U-shaped portion of the slit, the outer member having a tongue on its swinging edge insertable through said slit in said inner member and having oppositely and laterally projecting locking tabs engageable with the edges of said laterally projecting portions of said main slit in said inner member, the front edge of said tongue being forwardly bowed providing a central tip and forwardly curved ends for said tabs thereof, said tongue having a slit adapted to receive said tab portion of said inner member when the said outer member is inserted in said slit in said inner member.

4. A carton comprising a pair of opposed swingable and bendable members having outer end portions which overlap when the members are in closed position, the inner of said members having a slit extending transversely thereof in spaced relation to its swinging edge and comprising a rearwardly facing U-shaped portion defining a forwardly projecting tab and aligned portions extending laterally from the arms of the U-shaped por-

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tions of the slit, the outer member having a tongue on its swinging edge insertable through said slit in said inner member and having oppositely and laterally projecting locking tabs engageable with the edges of said laterally projecting portions of said main slit in said inner member, said tongue having a slit adapted to receive said tab portion of said inner member when the said tongue of said outer member is inserted in said slit in said inner member.

5. A carton comprising a pair of opposed relatively swingable and bendable members having outer end portions which overlap when the members are in closed position, the inner of said members having a main slit extending transversely thereof in spaced relation to its swinging edge and comprising a rearwardly facing U-shaped central portion and aligned angled portions extending laterally from the inner ends of the arms of the U-shaped portion of the slit, said inner member having an auxiliary slit extending from the bight portion of said main slit toward the swinging edge of said inner member to facilitate the flexing of the inner member at the front of said main slit therein, the outer member having a tongue on its swinging edge insertable through said slit in said inner member and having oppositely and laterally projecting tabs engageable with the edges of said laterally projecting portions of said main slit in said inner member, the front edge of said tongue being forwardly bowed providing a central tip and curved ends for said tabs thereof the tongue of the outer member having a U-shaped slit at the base thereof, the said rearwardly facing U-shaped central portion of said slit in said inner member defining a forwardly projecting tongue which is received by said U-shaped slit in said tongue to constitute a guide for the edge of the outer member thereby facilitating the engagement of the members.

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