Nov. 9, 1926. 1,606,439

H. L. METZGER

RECLOSING CARTON

Filed May 20, 1926 2 Sheets-Sheet 1

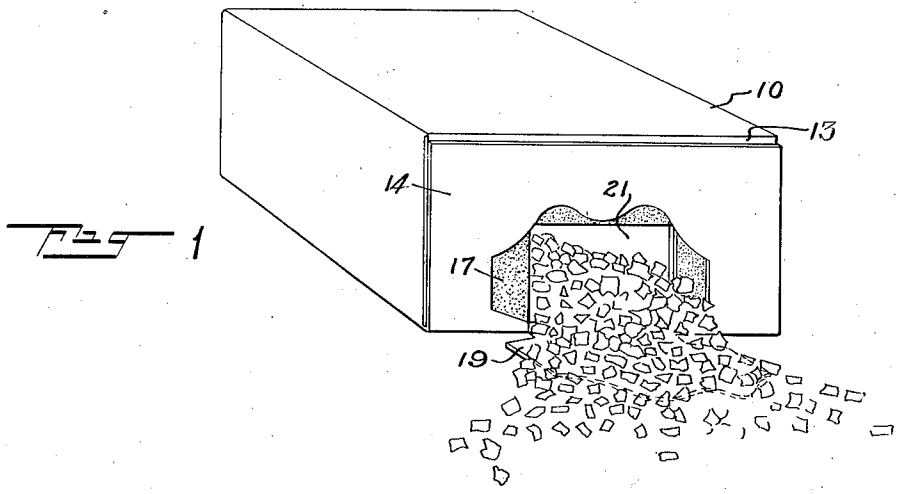


Fig 1

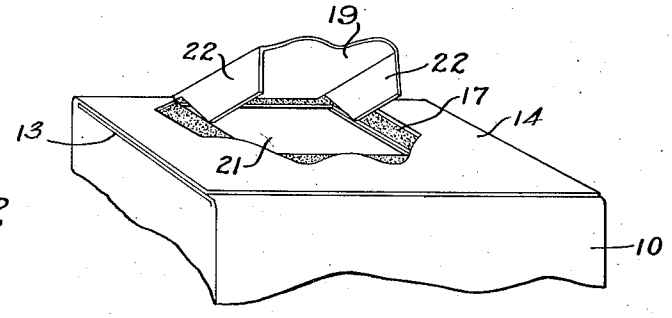


Fig 2

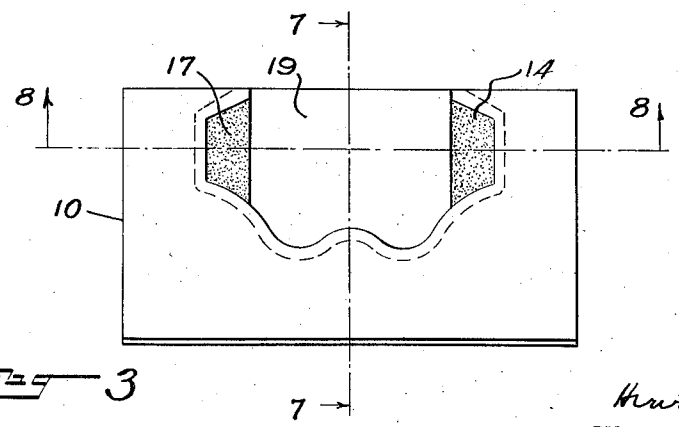


Fig 3

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Fig 4

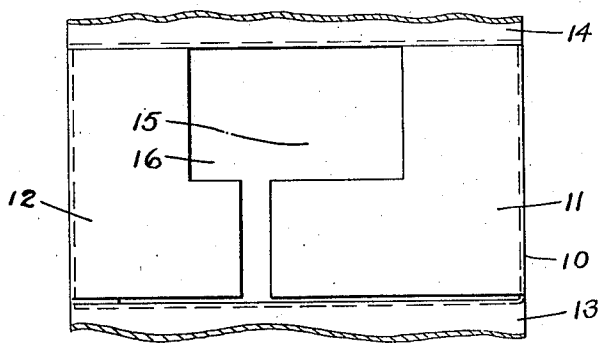


Fig 5

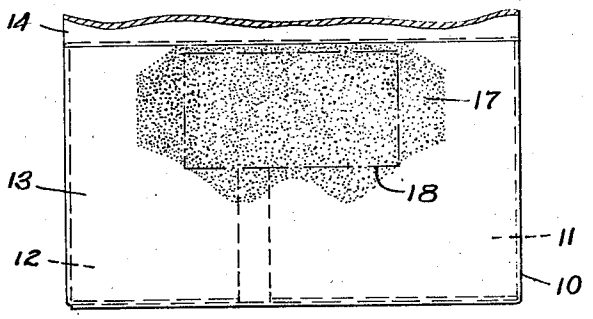
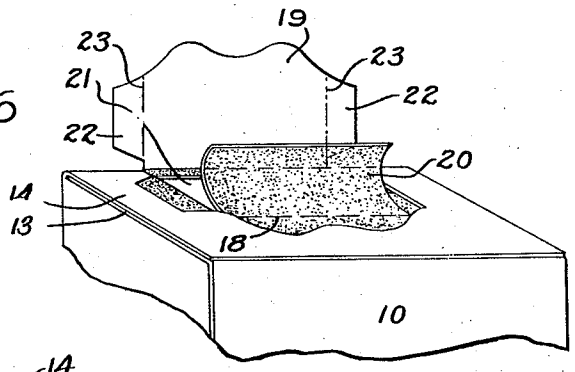


Fig 6



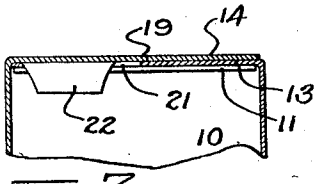


Fig 7

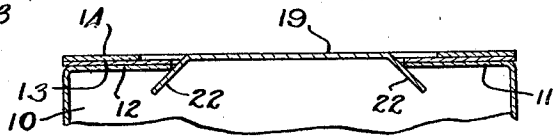


Fig 8

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Patented Nov. 9, 1926. 1,606,439

UNITED STATES PATENT OFFICE.

HENRY L. METZGER, OF CASTLETON ON HUDSON, NEW YORK, ASSIGNOR TO FORT ORANGE PAPER COMPANY, OF CASTLETON ON HUDSON, NEW YORK, A CORPORATION OF NEW YORK.

RECLOSING CARTON.

Application filed May 20, 1926. Serial No. 110,354.

Fig. 1 is a view in perspective of a carton equipped with a reclosing structure embodying the invention and showing the reclosing member in open position; Fig. 2 is a perspective view of a portion of the carton showing the reclosing member in partly closed position; Fig. 3 is a plan view of the top of the carton showing the reclosing member in closed position; Fig. 4 is a view similar to Fig. 3 with parts broken away to show the formation of the inner end-fold closure tabs; Fig. 5 is a view similar to Fig. 4 and showing the construction of the closure tab immediately adjacent to the outermost tab; Fig. 6 is a perspective view of the upper end of the carton showing a hinged closure member formed in the outermost tab and a removable section in the next adjacent tab; Fig. 7 is a sectional view taken on the line 7—7 of Fig. 3; and Fig. 8 is a sectional view taken on the line 8—8 of Fig. 3.

My invention relates generally to a carton structure of the reclosing type. The invention has for an object the formation of a carton which can be readily and effectively reclosed after the package has been opened to gain access to the contents thereof. The invention comprises the application of opening and reclosing means to a sealed end type of carton and in applying the opening and reclosing means in such manner that ordinary package filling and sealing operations, as conducted in automatic filling machines, or otherwise, are in no way restricted or disturbed. In practice this desirable result is achieved by forming in the end flap or tab, which occupies the uppermost position when the flaps are folded down and sealed, a partially cut out closure flap which can be opened out to pivot or swing about one edge. The flap member which occupies a position just beneath the uppermost flap in the closed condition of the carton is provided with a section so defined by scoring lines or perforations that the section can be wholly removed from its position to thereby provide an opening in the tab member through which the contents of the carton may be removed. The closure flap in the uppermost tab member overlies the opening in the tab member beneath and by bending the opposite side edge portions of the closure flap inwardly they can be inserted at the opposite ends of the access opening to hold the closure flap in closing relation to the opening. Other features of the invention will be hereinafter described and claimed.

Referring to the drawings for a more particular description of the invention, a carton 10 is shown which is provided with tab members 11, 12, 13 and 14 at its end which are adapted to be folded in closing relation to the end of the carton and sealed permanently in their closed position. This is a standard form of construction and the invention herein is adapted to be applied to standard types of sealed end cartons without in any way interfering with the sealing operation or the sealed construction of the carton.

In order to provide an opening through which access can be had to the contents of the carton without disturbing the sealed end fold tab members, the side wall tab members 11 and 12 are provided with cut out or recessed portions 15 and 16 as is shown in Fig. 4 of the drawings. The forward wall tab member 13 is then sealed into permanent engagement with the upper faces of the folded in side wall tab members 11 and 12. The forward wall tab member 13 is provided with an adhesive repellent area or section 17 and with a scored line 18 shown in Fig. 5 of the drawings as forming a rectangle.

The rearward wall tab member 14 is then folded inward and sealed to the upper surface of the tab member 13. The sealing action, however, does not take place between the outermost tab member 14 and the tab member 13 in the area 17 to which the adhesive repellent material such as varnish or printers' ink had been applied. It will be seen, however, that the tab member 14 is sealed throughout its marginal portions to the tab member 13 beneath so that the contents of the carton are effectually prevented from sifting or leaking through the closed end of the packet.

The outermost tab member 14 is provided with a partially cut out closure member 19 which when opened out by separating the closure 19 from its connection with the tab member along the partially cut out line, has a hinged relation to the tab member 14 as is clearly shown in Fig. 6 of the drawings. In the normal position which the closure member 19 occupies during storage or before

the package is opened, the closure member lies in the same plane with the remaining portion of the closing tab member 14. The edges of the closure member 19 are connected at intervals to the edges of the surrounding portions of the tab member, this temporary connection being provided by webs of material which were not severed in the formation of the scored or cut line which formed the closure tab member. In this normal position of the closure tab member, the laterally extending portions 22 occupy positions in contact with the outer surface of the underlying tab member 13. The opening out of the closure member 19 gives access to the section 20 of the tab member 13 which is defined by the scored line 18 already referred to. The section 20 of the tab member 13 may be removed as is shown in Fig. 6 of the drawing, thereby providing an opening 21 whose edges are coextensive with the scored line 18 in Fig. 5 of the drawings.

It will be seen that the hinged closure member 19 can be moved into closing relation to the access opening 21 in the tab member 13 and in order to maintain the closure member 19 in closed relation to the opening 21, the end portions 22 of the closure member 19 are bent along the lines 23 to positions at right angles to the body of the closure member as is shown in Fig. 2 of the drawings. The folded end portions 22 are adapted to be inserted in the opening 21 in engagement with the opposite edges thereof, so that when the closure member is moved to completely closed position, as is shown in Figs. 3, 7 and 8 of the drawings, the folded end portions 22 flare outwardly to provide holding members for securing the cover or closure member 19 in its closed position.

In order to make use of the reclosing device described, it is necessary merely to lift the closure member 19 from its partially cut out position in the outer tab member 14 and then to remove completely from its position the removable section 20 of the tab member 13 just beneath. Access can then be had to the contents of the package through the opening 21 thus provided. The contents of the package may be poured through the opening across the face of the hinged closure member 19 as is shown in Fig. 1 of the drawings or a spoon may be inserted through the opening 21 for removal of portions of the contents of the cartons, as may be desired. In order to reclose the carton, the end portions 22 of the closure member 19 are bent inwardly, as is shown in Fig. 2 of the drawings, and inserted in the opening 21 whereupon the closure member 19 is moved to completely closed position, as is shown in Fig. 3 of the drawings. Access can again be had to the contents of the package merely by swinging the closure member 19 to its open position, as will be clear.

What I claim is:

1. In a carton having end closing tab members, a hinged closure member formed in partially cut out condition in the outermost tab member, a removable section formed in the inner tab member beneath the hinged closure member, and said hinged closure member having laterally extending portions adapted to enter the opening made by the removed section and engage the lateral edges of the opening to hold the closure member in closing relation to the opening.

2. In a carton having sealed end closing tab members, a hinged closure member formed in partially cut out condition in the outermost tab member, an adhesive repellent surface provided on a section of the inner tab member beneath the closure member, and a removable section formed in the inner tab member beneath the closure member.

3. In a carton having sealed end closing tab members, a hinged closure member formed in partially cut out condition in the outermost tab member, an adhesive repellent area provided on one of the contiguous surfaces of the tab members, a removable section formed in the tab member beneath the closure member, and the closure member being formed to enter the opening formed by the removed section and maintain itself in closing relation thereto.

4. In a carton having end closing tab members, a hinged closure member formed in partially cut out condition in the outermost tab member, a removable section formed in the tab member beneath the closure member, the opening formed by the removed section having a less width than the width of the closure member, and the lateral edge portions of the closure member being bent inwardly to enter the opening in the tab member and engage the side edges thereof to maintain the closure member in closing relation to the opening.

5. In a carton having end closing tab members sealed together in their marginal areas but unsealed in a centrally disposed area, a hinged closure member formed in partially cut out condition in the outermost tab member within the unsealed portion thereof, a removable section formed in the tab member beneath the closure member, the opening formed by the removed section having a less width than the width of the closure member, the lateral edge portions of the closure member being bent inwardly to enter the opening in the tab member and engage the side edges thereof to maintain the closure member in closing relation to the opening, and the tab members beneath said tab member having the opening therein being provided with cut away portions registering with said opening.

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