May 16, 1944. R. GUYER 2,349,088

CARTON

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Fig. 1

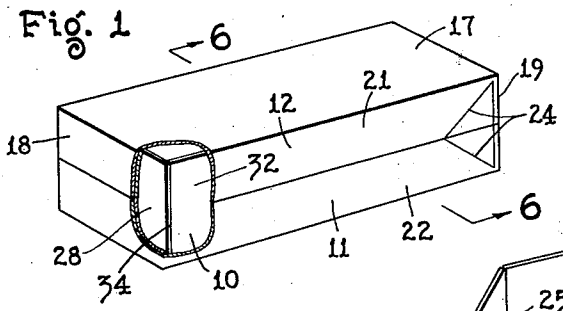


Fig. 2

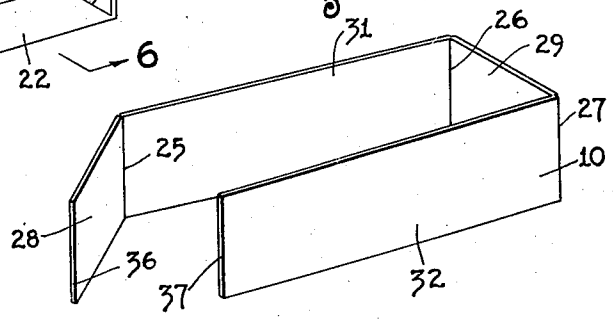


Fig. 3

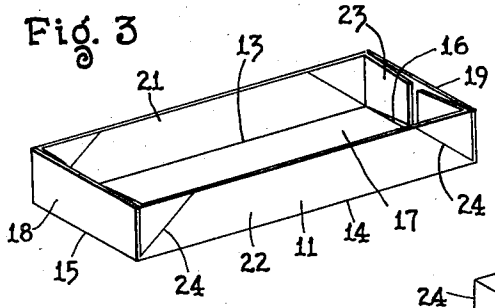


Fig. 4

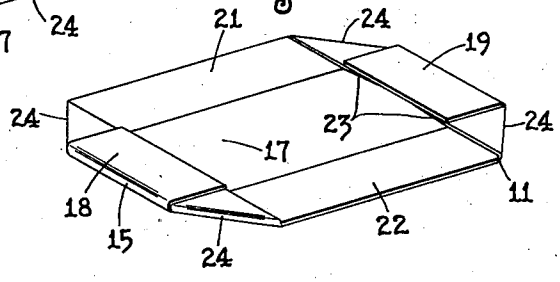


Fig. 5

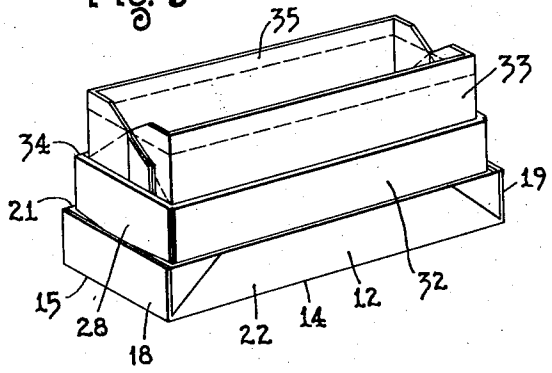
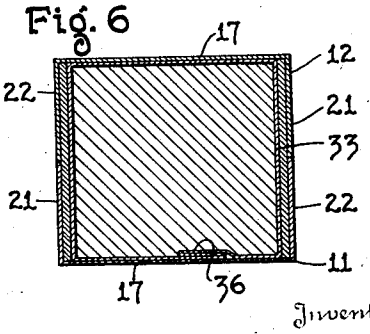


Fig. 6



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Fig. 7

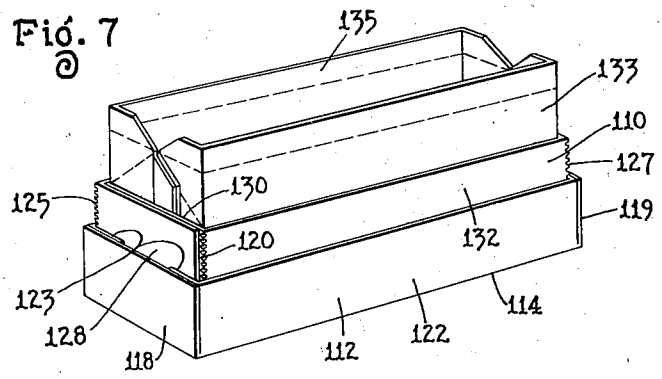


Fig. 8

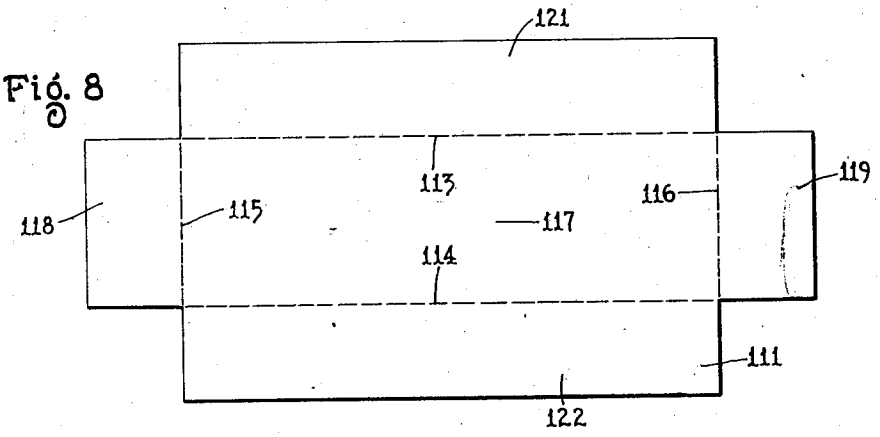


Fig. 9

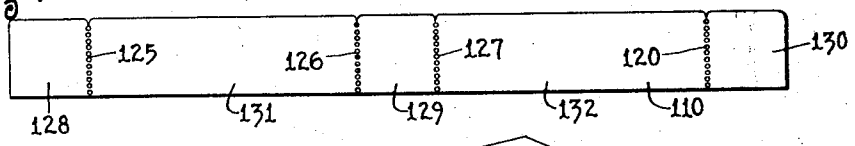
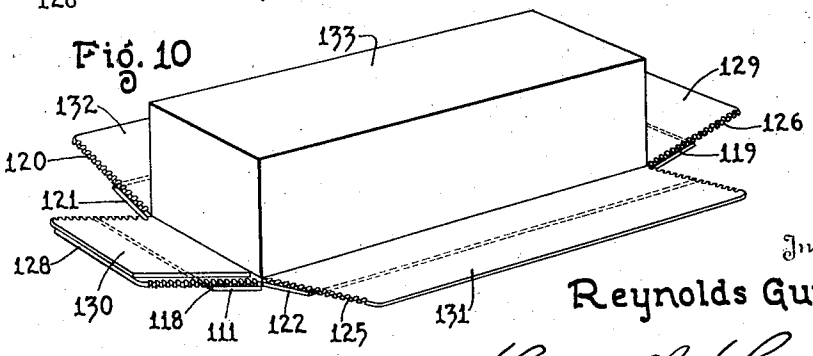


Fig. 10



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UNITED STATES PATENT OFFICE

2,349,088

CARTON

Reynolds Guyer, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota

Application May 13, 1940, Serial No. 334,749

1 Claim. (Cl. 229—23)

My invention relates to cartons and has for an object to provide a carton adapted to be used for packaging substances in a manner to give ready access thereto when dispensing of the substance is desired.

An object of the invention resides in providing the carton with a sleeve open at the top and bottom severable at one or more of the corners thereof to permit of disengagement of the walls of the sleeve to expose the contents of the carton.

Another object of the invention resides in providing a tray having lateral walls corresponding to those of the sleeve and in which the sleeve is disposed.

A feature of the invention resides in constructing the lateral walls of the tray of a height less than the height of the lateral walls of the sleeve to expose the upper portion of the sleeve.

An object of the invention resides in providing a closure for the carton engaging the exposed portion of the sleeve.

A feature of the invention resides in making the closure and tray similar in construction.

A still further object of the invention resides in constructing one or more of the corners between the lateral walls of the tray severable or disconnected, and in attaching the walls of the tray to the walls of the sleeve to permit of jointly disconnecting the walls of the sleeve and tray to expose the contents of the carton.

Another object of the invention resides in the method of dispensing the substance in which a wrapper is disposed within the tray and the contents placed within the wrapper while the wrapper is held in position by the tray and subsequently closed.

Another object of the invention resides in the method of packaging a substance in which the substance contained within the closed wrapper and sleeve is inserted into the tray with the closed end of the wrapper disposed lowermost to expose the opposite portion of the wrapper.

Other objects of the invention reside in the novel combination and arrangement of parts and in the details of construction hereinafter illustrated and/or described.

In the drawings:

Fig. 1 is a perspective view of a carton illustrating an embodiment of my invention.

Fig. 2 is a perspective view of the sleeve used with the carton shown in Fig. 1.

Fig. 3 is a perspective view of a tray or closure used with the carton and illustrating the walls in erected position.

Fig. 4 is a perspective view of the structure shown in Fig. 3 with the walls collapsed.

Fig. 5 is a perspective view of the wrapper, sleeve and closure of the carton assembled and ready to receive the contents of the carton.

Fig. 6 is a cross sectional view taken on line 6—6 of Fig. 1.

Fig. 7 is a view similar to Fig. 5 illustrating a modification of the invention.

Fig. 8 is a developed view of the blank from which the tray of the carton shown in Fig. 7 is constructed.

Fig. 9 is a developed view of the blank from which the sleeve of the carton shown in Fig. 7 is constructed.

Fig. 10 is a perspective view of the carton with the closure removed and the walls of the sleeve and tray disconnected to expose the contents of the carton.

In the use of cartons ordinarily employed for packaging butter and similar substances the contents of the carton are extremely inaccessible and considerable difficulty and inconvenience is encountered when it is desired to reclose the carton.

The present invention provides a simple construction whereby the desired results may be readily procured and a method by means of which the substance may be readily packaged.

My invention, as illustrated in Fig. 1, comprises a sleeve 10 open at the top and bottom, a tray 11 in which the sleeve is received and a closure 12 for closing the upper open end thereof. These various parts will now be described in detail.

In the form of the invention shown in Fig. 1 the tray 11 and the closure 12 are identical in construction and only the tray 11 will be described in detail. The same reference numerals will however be used to designate similar parts. This tray is shown in Fig. 3 and is constructed from a blank which is provided with longitudinal scores 13 and 14 and transverse scores 15 and 16 which divide the blank into a bottom 17, end walls 18 and 19 and side walls 21 and 22. The blank is sheared along the scores 13 and 14 outwardly of the scores 15 and 16 to provide flaps 23. The various flaps and walls of the carton may be folded as shown in Fig. 3 and the said flaps 23 secured to the end walls 18 and 19 by adhesive or in any other suitable manner. The walls 21 and 22 are also formed with diagonal scores 24 by means of which the tray may be folded into collapsed position, as shown in Fig. 4.

The sleeve 10 is shown in detail in Fig. 2 and

consists of a strip of heavy fiber board or cardboard which is scored transversely along lines 25, 26 and 27 to form lateral end walls 28 and 29, and lateral side walls 31 and 32. These walls are of such dimensions that the same, when folded into the form of a sleeve, as shown in Figs. 1 and 5, are adapted to be received within the tray 11, as illustrated in Fig. 1. The ends 36 and 37 of the portion of the blank forming the end walls 28 and 32 are adapted to meet, as indicated in Fig. 1, to form a severable corner or connection 34 between the said walls. While I have shown this corner as completely detached it can readily be comprehended that the same may be constructed as in the other form of the invention which is to be presently described in detail. It will be noted that the height of the lateral walls of the sleeve 10 is greater than the height of either the tray 11 or closure 12 so that, when the sleeve is placed within either the closure or the tray, the other thereof may engage the protruding portion of the said sleeve. In this manner both the tray and closure are held in proper position by means of the said sleeve.

The method of using the invention is as follows: The sleeve 10 is first folded up into rectangular form, as shown in Fig. 5, and inserted into the closure 12 or into any other temporary support. Thereafter a wrapper, such as indicated at 33 in Fig. 5, and which may be of conventional form and constructed of suitable flexible paper is inserted within the sleeve 10. The substance to be packaged is next placed within the wrapper and the upper open end 35 of the wrapper closed to form a seal 36, best shown in Fig. 6. The tray 11 is thereafter applied to the exposed portion of the sleeve 10 and the package inverted. The parts then become arranged, as illustrated in Fig. 1. When it becomes desirable to remove the contents from the carton the closure 12 is first removed. This exposes the bottom of the wrapper 33 which may be printed or otherwise embellished. The sleeve and contents are then withdrawn from the tray 11. Upon removal of the sleeve the severable corner 34 thereof may be disconnected, whereupon the walls of the sleeve may be folded away from the substance and the substance thus rendered completely accessible. After a portion of the substance has been dispensed, the remainder may be placed in the sleeve and the sleeve re-placed in the tray 11 and the closure 12 applied to the sleeve. The carton thus becomes re-closed.

In Figs. 7 to 10 I have shown a modification of the invention. In this form of the invention a sleeve 110, a tray 111 and a closure 112 are employed which are similar to those employed with the other form of the invention. The closure 112 being identical with the closure 12, the description thereof will not be repeated and corresponding reference numerals preceded by the digit 1 used to indicate corresponding parts.

The tray 111 is constructed from a blank shown in Fig. 8 which is provided with scores 213, 214, 215, and 216, similar to those of the tray 11 which divide the said blank into a bottom 217, lateral end walls 218 and 219, and lateral side walls 221 and 222. This tray differs, however, from the tray illustrated in Fig. 3 in that the tabs 23 shown on the former tray are omitted. This causes the lateral walls to become disconnected at the corners when the lateral walls are folded at right angles to the bottom 217 of the tray.

The sleeve 110 is constructed similarly to the sleeve 10, excepting that the same is perforated transversely, as indicated at 125, 126, 127 and 120 to form lateral end walls 128 and 129, and lateral side walls 131 and 132, and an end wall flap 130. The flap 130 is glued or otherwise secured to the end wall 128 so that, when the said sleeve is erected, the same takes the form shown in Fig. 7. By means of the perforations 125, 126, 127 and 120 the corners of the sleeve become severable so that the same may be readily broken apart, as will hereinafter be more fully explained.

The method of packaging with the invention disclosed in Figs. 7 to 10 is similar to that previously described. The sleeve 110 is first inserted into the closure 112 with the wrapper 133 within the same. The substance to be packaged is then placed in the wrapper and the wrapper closed and sealed, as previously described. The tray 111 is next applied to the exposed portion of the sleeve 110 with the bottom 217 thereof closing the open end of the sleeve. The lateral walls of the tray are next glued or otherwise secured to the protruding ends of the lateral walls of the sleeve. When the carton is to be opened the same is inverted and the closure 112 removed. Thereafter the severable corners formed by the perforations 225, 226, 227 and 220 may be broken. The walls of the sleeve 110, together with the walls of the tray 111, may then be swung outwardly as shown in Fig. 10, which readily expose the contents of the carton. In such position the bottom 217 forms a cutting board on which the cheese may be cut. When the carton is desired to be closed, the walls are again folded up and the closure 112 applied which holds the carton in reclosed position.

While I have shown in Fig. 1 the joint or corner 34 of the sleeve 10 as being disconnected, and likewise in Fig. 8 the corners between the lateral walls of the tray also as being disconnected, it can readily be comprehended that flaps may be employed and secured to the joining walls to connect the walls together and the corners thereof be perforated the same as the sleeve 110.

The advantages of my invention are manifest. When the substance is packaged by means of my improved invention and method the contents are easily and readily accessible for dispensing. When the closure for the carton is removed the portion of the package, opposite the seal, is exposed, so that the printing on the wrapper is not rendered inconspicuous by the seal of the wrapper. The sleeve with my invention serves a dual purpose in that it forms a support for the contents of the carton and at the same time serves as a support over which both the tray and the closure may telescope. With my invention the carton can be easily opened and equally as easily reclosed. My improved carton can be constructed at an extremely economical cost.

Changes in the specific form of my invention, as hereindisclosed, may be made within the scope of what is claimed without departing from the spirit of my invention.

Having described my invention, what I claim as new and desire to protect by Letters Patent is:

A carton comprising a sleeve having lateral walls and open at both the top and the bottom, said sleeve being weakened by perforations at all of the corners thereof to permit ready severance of the walls thereof, a closure having a bottom and lateral walls connected thereto, said walls being securely connected at the meeting edges thereof, said closure fitting over one open end

of the tray and telescoping relative thereto, a liner within the sleeve and closure and open at the top to receive the substance to be packaged, said sleeve and closure forming a mold for the substance, the free ends of the liner being closed in upon the exposed surface of the substance, a tray comprising a bottom and lateral walls hingedly connected thereto, said walls terminating in free cut edges at the corners of the tray with the adjacent ends of said walls being disconnected at said corners, said tray fitting over the other open end of the sleeve and covering the folded-in free ends of the liner, said sleeve being of a height at least as great as the combined heights of the lateral walls of the closure and tray, the lateral walls of the tray being secured along the inner surfaces thereof to the contacting surfaces of the sleeve, said closure on filling of the carton forming a bottom for the carton and holding the sleeve in erect position, said tray after filling forming a cover for the carton, said tray upon inversion of the carton serving as a tray, the lateral walls, said sleeve and tray upon severance of the walls of the sleeve at the corners thereof folding downwardly into the plane of the bottom of the tray to expose the contents of the carton, the bottom of the tray serving as a cutting board for facilitating the dispensing of the contents of the carton, said closure when the carton is inverted serving as a closure both before and after severance of the walls of the sleeve and holding the folded parts of the sleeve and tray in reclosing position.

REYNOLDS GUYER.