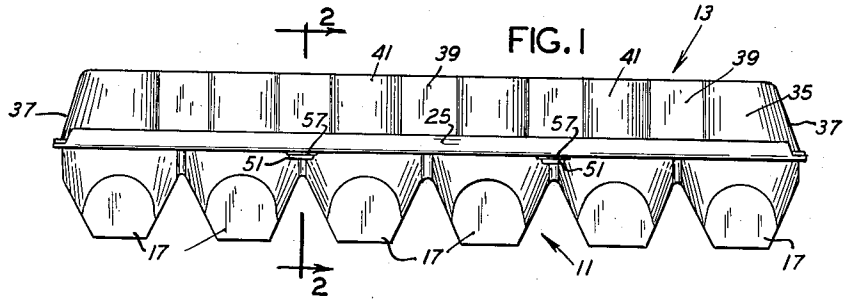
Feb. 7, 1961 H. H. HEATH 2,970,734

EGG CARTON

Filed Aug. 4, 1958

FIG. 1



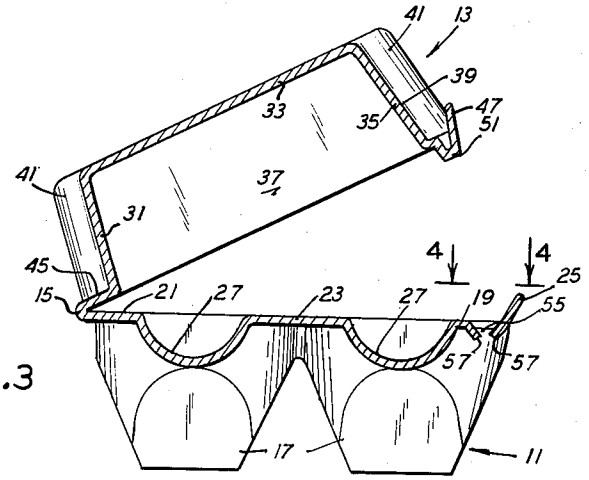


FIG. 3

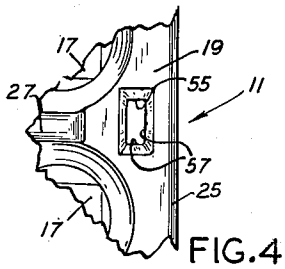


FIG. 4

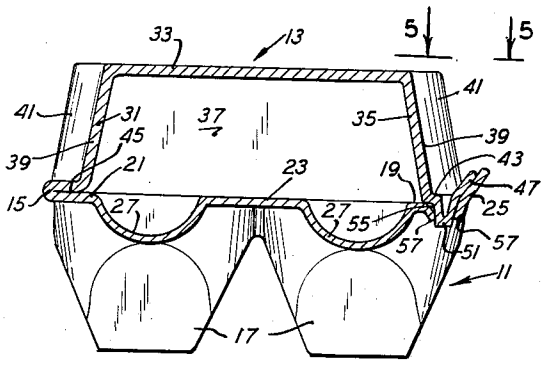


FIG. 2

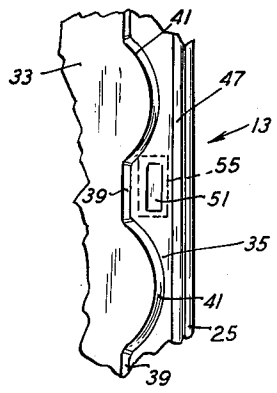


FIG. 5

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EGG CARTON

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1 Claim. (Cl. 229—2.5)

This invention relates to egg cartons and particularly to egg cartons formed of molded pulp fiber.

It is a main object of the present invention to provide an egg carton with a simple latching or locking means to hold the cover portion of the carton in closed relation to the base portion.

A further object of the invention is to provide an egg carton of the type just described in which the latching or locking means includes a pair of lugs on one portion which automatically enter openings on the other portion upon closure of the cover portion with respect to the base portion.

A still further object of the invention is to provide such a carton having a protruding lip on the base portion precluding the carton being picked up grasping the front edge of the cover portion.

Another object of the invention is to provide a carton in which the lug openings are formed to resist withdrawal of the latching lugs from the openings.

Various other objects of the invention will be apparent from the following description taken in connection with the accompanying drawings wherein:

Fig. 1 is a front elevational view of a molded pulp fiber carton of the present invention showing the same in its closed condition;

Fig. 2 is a transverse section taken along lines 2—2 of Fig. 1, on a scale larger than that employed in Fig. 1;

Fig. 3 is a view similar to Fig. 2, but showing the carton in its opened condition;

Fig. 4 is a fragmentary plan view taken in the direction of the arrows 4—4 in Fig. 3 showing a latch lug opening; and

Fig. 5 is a fragmentary plan view taken in the direction of the arrows 5—5 in Fig. 2.

Referring particularly to Figs. 1, 2 and 3, the egg carton shown is of molded pulp fiber construction and includes a base portion indicated by the general reference numeral 11 and a cover portion indicated by the general reference numeral 13 integrally connected along one pair of longitudinal edges by a hinge portion 15. The base portion is molded to provide a plurality of essentially separate pockets 17, the interior portions of which are roughly circular in cross section at the upper portions thereof and merge into square cross-sectional portions at the lower portions thereof. This construction leaves a series of triangular lands 19 as shown in Fig. 4 at the front lower margin of the base portion, a similar set of lands 21 at the rear margin of the base portion and a plurality of central lands 23 distributed along the length of the base portion. The front margin provides a short, upwardly projecting lip 25 for a purpose to be described presently.

In the particular carton shown, the walls between longitudinally adjacent pockets are recessed downwardly at 27, as shown in Figs. 2 and 3, for reasons not necessary to explain.

The cover portion 13 is of generally hollow form having a rear wall 31, a top wall 33, a front wall 35 and end walls 37. The front and rear walls are molded of undulated form to provide concave parts 39 as shown in Figs. 1 and 5 and convex portions 41, the latter being in transverse register with the pockets of the base portion. This construction provides horizontal lands 43 at the front margin of the cover portion and similar lands 45 at the rear margin.

The front margin of the cover portion has an upwardly projecting lip 47 which is disposed next to and in nesting relation with respect to the lip 25 in the closed condition of the carton.

Formed in the cover portion during the molding process is a pair of depending hollow lugs 51 which extend in a direction at right angles to the plane between the base portion and the cover portion in the closed position of the carton. It is thus apparent that the direction of extension of a lug is also at right angles to a radius extending through the hinge axis of the cover and also extending through the lug.

Formed in each of the two lands 19 in register with the associated lug 51 is an opening 55. The margins around each opening are inclined downwardly, to provide latching edges 57. The opening defined by the edges is slightly smaller than the cross-sectional dimensions of the lugs so that the edges are compressed slightly outwardly when the lug is pressed into the opening. The edges thus resist withdrawal of the lug from the opening because the corners of the edges bite into the side walls of the lugs. This resistance is enough to enable a filled carton to be lifted by grasping the cover portion 13 only. However, the lip 25 is made to extend upwardly further than the lip 47 to encourage lifting of the carton by grasping the base portion, and to prevent lifting of the carton by grasping the lip 47. The hidden lip 47 does, however, provide a convenient means by which the cover portion may be opened by pulling up on the lip.

Preferably each lug 51 is slightly tapered from top to bottom to facilitate its ready entry into the associated opening. This taper is not sufficient to interfere with the latching qualities of the edges 57 on the sides of the lugs.

It is pointed out that the openings are the same distance from the hinge axis as the lugs so that the lugs automatically enter the openings when the cover portion is closed.

It is further pointed out that the present invention has provided a latch arrangement that may readily be formed in the molding process during the formation of the carton from pulp fibers.

Having described the invention in what is considered to be the preferred embodiment thereof, it is desired that it be understood that the invention is not to be limited other than by the provisions of the following claim.

I claim:

A molded pulp fiber egg carton having a body section for holding a plurality of eggs and a cover section hinged at one of its edges to an edge of the body section and movable to and from a position covering the eggs in the body section, the edge portions of said body and cover sections remote from the mentioned edges being contiguous when said cover section is closed, one of said edge portions having a lug projecting in a direction which is generally at right angles to the plane between the meeting edges of said body section and cover section in the closed position of the cover section, the other of the just-mentioned edge portions being formed with an opening to receive said lug, the margins defining said opening being inclined downwardly to provide inwardly projecting corners to engage said lug, said opening being of a size slightly smaller than the lug so that the lug fits snugly into the opening to slightly expand the opening in a down-

wardly and outwardly direction so that the mentioned corners bite into the sides of the lug to retain the lug against accidental withdrawal, said cover section having an upwardly extending lip remote from the hinge between the body and cover section to enable the cover section to be readily opened by grasping said lip and pulling upwardly, the body section also having a lip remote from said hinge and extending upwardly beyond the cover lip to encourage lifting the carton by grasping the carton at the hinge and body section lip.

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