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DETACHABLE CARTON HANDLE

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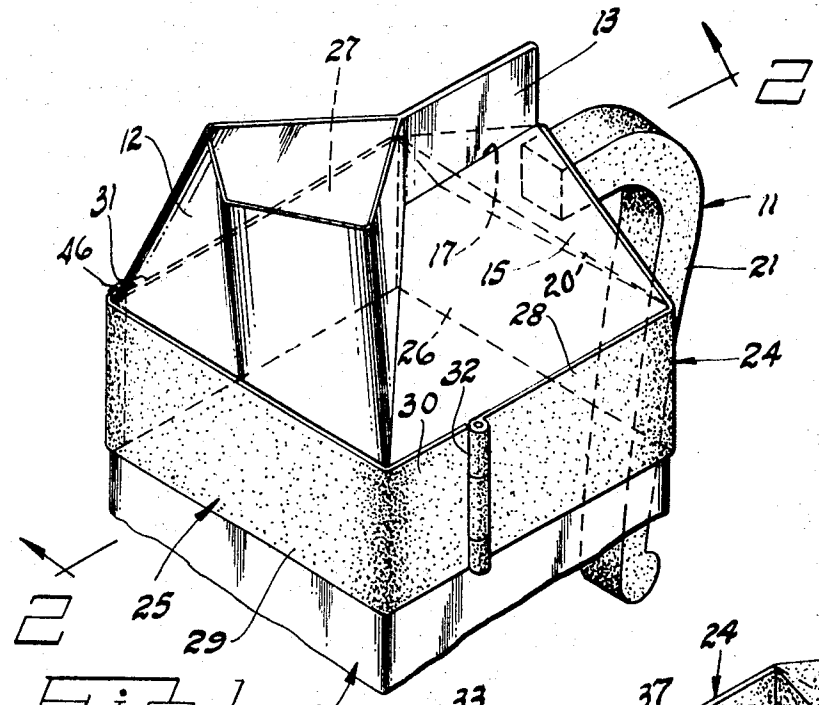


Fig. 1

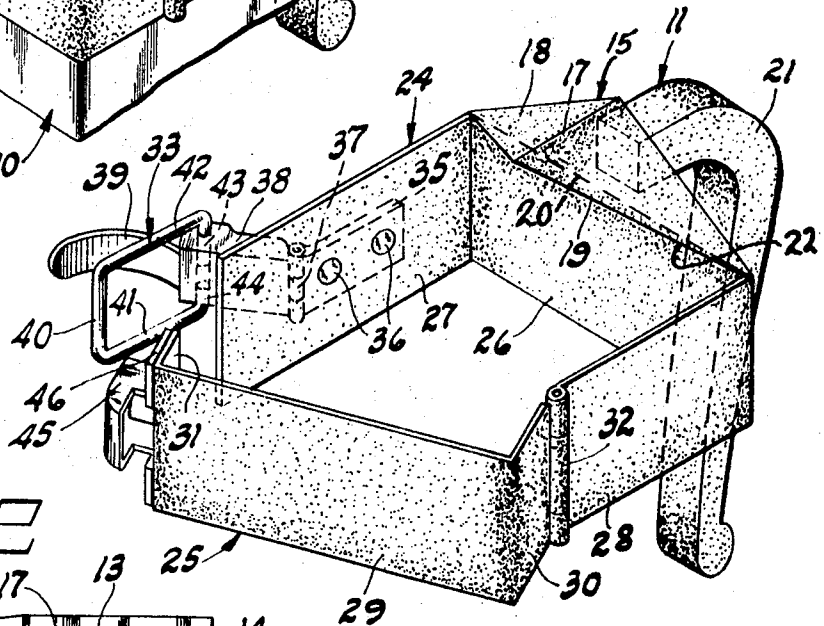


Fig. 2

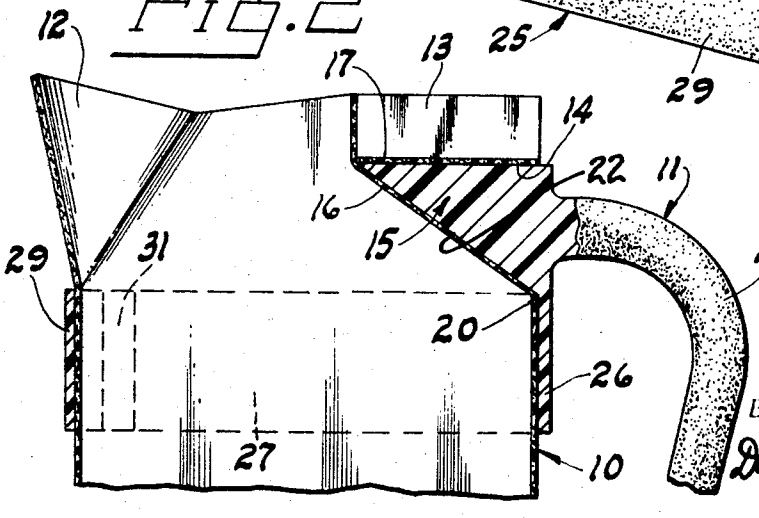


Fig. 3

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DETACHABLE CARTON HANDLE

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ABSTRACT OF THE DISCLOSURE

A detachable carton handle for use on large milk cartons and the like, and which includes a rectangular housing comprising a U-shaped rear housing portion and a mating U-shaped front housing portion hingedly connected to said rear housing portion, whereby the rectangular housing may be opened for detachably mounting the handle on a carton. A releasable locking means is provided for securing the U-shaped rear housing portion to the U-shaped front housing portion after these portions have been mounted on a carton. A handle is attached to the U-shaped rear housing portion. A retainer member is integrally formed on the rear housing portion for insertion into the opening on one side of the upper end of a carton under the top seal joint at a point opposite to the pouring lip of the carton.

SUMMARY OF THE INVENTION

This invention relates to a novel and improved detachable carton handle, and more particularly to a carton handle which may be quickly and easily mounted on a milk carton or the like.

At the present time, milk, fruit juices, and other fluids are sold on the market in large cartons, as for example in gallon and half-gallon size cartons. These cartons are used because it is economical to make these cartons and to fill and seal the same. These cartons are generally made from a suitable paper board covered with a plastic. A disadvantage of these large cartons is that they are difficult to handle and to pour a fluid from the same. Accordingly, it is an important object of the present invention to provide a novel and improved detachable carton handle which may be quickly and easily mounted on a large carton, and with which a large carton may be easily handled and the contents thereof poured out in an efficient and easy manner.

It is another object of the present invention to provide a detachable carton handle which is simple and compact in construction, economical to manufacture, and light in weight.

It is still another object of the present invention to provide a novel and improved detachable carton handle which is adapted for use on large cartons and containers.

It is a further object of the present invention to provide a novel and improved detachable carton handle which embodies a pyramidal shaped retainer member, and a releasable locking means for securing the handle to a carton.

It is still another object of the present invention to provide a novel and improved detachable carton handle which is easy to use and which may be quickly secured to a carton, or quickly detached from a carton, and which is adapted to provide a secure means for lifting and transporting a fluid carton.

It is still another object of the present invention to provide a novel and improved detachable carton handle which includes a rectangular housing comprising a U-shaped rear housing portion and a U-shaped front housing portion, means hingedly connecting one of the ends of the U-shaped rear housing portion to one of the ends of the U-shaped front housing portion, releasable locking means detachably connecting the other end of the U-shaped housing portion to the other end of the U-shaped front housing portion, a handle attached to said U-shaped rear housing portion, and a retainer means carried on said U-shaped rear housing portion and projecting into a recess in the carton for gripping engagement with the carton.

Other objects, features and advantages of this invention will be apparent from the following detailed description, appended claims, and the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is an elevational perspective view of a detachable carton handle made in accordance with the principles of the present invention, and showing the handle operatively attached to the upper end of a conventional coated paper board milk carton.

FIG. 2 is an elevational section view of the carton handle structure shown in FIG. 1, taken along the line 2—2 thereof, and looking in the direction of the arrows.

FIG. 3 is a perspective view of the detachable carton handle illustrated in FIG. 1, and showing the handle in a released and detached condition.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawing, and in particular to FIG. 1, the numeral **10** generally designates a large size milk carton, as for example, a gallon milk carton, on which is operatively mounted an illustrative carton handle **11**. The numeral **12** designates the carton pouring spout. The numeral **13** designates the top seal joint member of the carton **10**. As shown in FIG. 2, the numeral **14** indicates the lower end of the seal joint **13** which remains after the pouring spout **12** is opened. The numeral **15** in FIG. 2 designates a pyramidal shaped retainer which is adapted to extend into the recess under the top seal joint **13** to assist in holding the handle **11** on the carton **10**.

As shown in FIGS. 2 and 3 the numeral **17** designates the horizontal peak of the pyramidal shaped retainer. The retainer **15** is adapted to extend into the recess formed on the upper end of the carton **10** between the carton closure panel **16**, which slopes inwardly and upwardly, and the adjacent side closure panels on the upper end of the carton **10**. The carton structure is conventional and the recess formed on the upper end of the carton is easily accessible to the retainer **15**. As shown in FIG. 3, the retainer **15** is provided on the upper side thereof with the two upwardly sloping side faces **18** and **19** which terminate at the peak **17**. As best seen in FIG. 2 the bottom face of the retainer **15** slopes downwardly and outwardly as indicated by the numeral **22**. The bottom face **22** terminates along the line indicated by the numeral **20**. A handle member **21** is integrally formed on the outer vertical face of the retainer **15**.

The carton handle of the present invention includes a U-shaped rear housing portion generally indicated by the numeral **24** and a U-shaped front housing portion generally indicated by the numeral **25**. The rear housing portion **24** includes the rear wall **26**, and the two integral side walls **27** and **28**. The U-shaped front housing portion **25** includes the front wall **29** and the two integral side walls **30** and **31**. As best seen in FIG. 3 the side walls **28** and **30** are hingedly connected by a suitable hinge means **32**. The side walls **27** and **31** are releasably connected by a suitable releasable locking means generally indicated by the numeral **33** in FIG. 3.

As shown in FIG. 3, the releasable locking means **33** includes a mounting plate **35** which is fixedly secured to the rear housing side wall **27** by a pair of rivets **36**. A locking clasp carrier plate **38** is swingably mounted at its

back end by the hinge means **37** to one end of the mounting plate **35**. A clasp operating handle **39** is fixed to the front end of the clasp carrier plate **38**. The clasp comprises a rectangular wire loop member including a front vertical wire leg **40** which is integral with the horizontal lower and upper legs **41** and **42**, respectively. A pair of vertical rear leg portions **43** and **44** are swingably mounted in a suitable hole in the front end of the clasp carrier plate **38**. The locking clasp is adapted to be swung over a locking clasp hook **45** which is fixedly mounted on a mounting plate **46** which is fixedly secured by any suitable means to the outer face of the front housing side wall **31**.

The carton handle of the present invention is mounted on a carton **10** by swinging the front housing portion **25** to an open position and then slidably mounting the rear housing portion **26** onto the rear side of the upper end of the carton so that the retainer member **15** is slidably received in the recess under the top seal joint **13**. The front housing portion **25** is then swung into an enclosing position around the front side of the carton **10** and the releasable locking means **13** is then operated. The clasp is swung over the hook **45** and the handle member **39** is then swung backward toward the plate **35** so as to bring the plate **38** in a locked parallel position against the outer face of the plate **35**.

While it will be apparent that the preferred embodiment of the invention herein disclosed is well calculated to fulfill the objects above stated, it will be appreciated that the invention is susceptible to modification, variation and change.

What I claim is:

1. A detachable carton handle for mounting on the upper end of a carton having a sealed top end and a recess formed under said sealed top end, comprising:

(a) a rectangular housing including a U-shaped rear housing portion and a U-shaped front housing portion;

(b) means hingedly connecting one of the ends of the U-shaped rear housing portion to one of the ends of the U-shaped front housing portion;

(c) releasable locking means detachably connecting the other end of the U-shaped rear housing portion to the other end of the U-shaped front housing portion;

(d) a handle attached to said U-shaped rear housing portion; and,

(e) a retainer member carried on said U-shaped rear housing portion and projecting inwardly into said recess on said carton.

2. A detachable carton handle as defined in claim **1**, wherein:

(a) said retainer member is pyramidal in shape.

3. A detachable carton handle as defined in claim **1**, wherein:

(a) said releasable locking means comprises a clasp swingably mounted on said other end of the U-shaped rear housing portion and operative to be releasably engaged with a clasp hook fixedly mounted on the other end of the U-shaped front housing portion.

References Cited

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