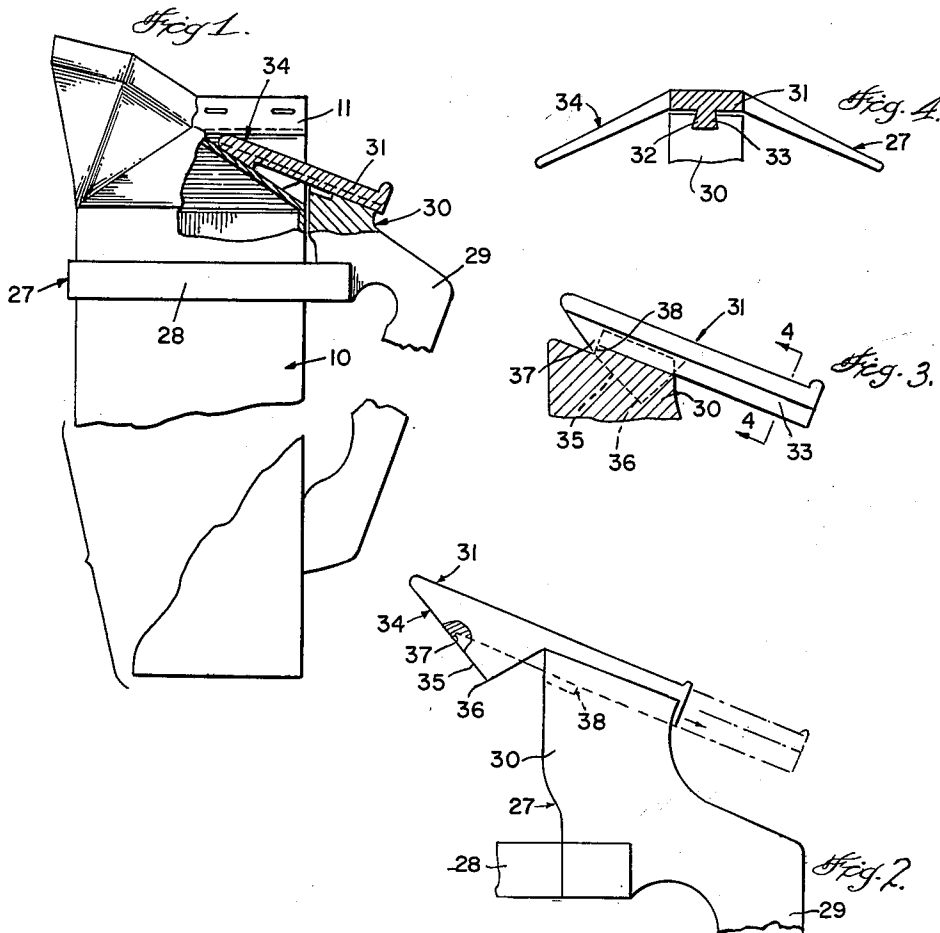


Jan. 15, 1963

W. A. BARNES
CARTON HANDLING DEVICE

3,073,642

Filed May 27, 1960



INVENTOR.

WILLIAM A. BARNES

BY *Victor J. Evans & Co.*

ATTORNEYS

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3,073,642

CARTON HANDLING DEVICE

William A. Barnes, 3655 Orchard Ave., Ogden, Utah

Filed May 27, 1960, Ser. No. 32,402

2 Claims. (Cl. 294-31.2)

This invention relates to a device for handling or holding cartons and more particularly a device for handling a carton containing a fluid or liquid such as milk.

The object of the invention is to provide a device which will facilitate the lifting of a carton such as a carton containing milk, and wherein the contents of the carton can be more easily poured or dispensed.

Another object of the invention is to provide a carton handling device which is adapted to be used with disposable type cartons such as cardboard milk cartons, and wherein the device can be used over and over again after the carton has been emptied and thrown away.

A further object of the invention is to provide a carton handling device which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawing, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

FIGURE 1 is an elevational view showing the carton handling device of the present invention mounted on a carton, with portions broken away,

FIGURE 2 is a fragmentary side elevational view showing in dotted lines the sliding movement of latch,

FIGURE 3 is a fragmentary sectional view with parts broken away showing certain of the details of the construction of the invention, and

FIGURE 4 is a sectional view taken on the line 4-4 of FIGURE 3.

Referring in detail to the drawing, the numeral 10 indicates a conventional carton which is being handled by the present invention, and the carton 10 is of the type which includes an under cut and inclined top portion 11. The carton 10 is adapted to hold a fluid or liquid such as milk.

According to the present invention there is provided a carton handling device which is indicated generally by the numeral 27 and the device 27 includes a rectangular frame 28 which surrounds the carton 10. An upright handle 29 is secured to or formed integrally with the frame 28 and on one end of the handle 29 is a support portion 30.

The support portion 30 on the upper end of the handle 29 serves to slidably support a movable keeper or latch 31. The latch 31 includes a depending tongue 33 which slidably engages a groove 32 in the support portion 30.

The movable latch 31 is provided with a diamond-shaped body portion 34 that has inclined surfaces 35 which provide shoulders 36 for engagement with the top portion 11 of the carton 10.

The body portion 34 is cut away so as to define a flange 37, and the support portion 30 is provided with a stop 38 that is adapted to coact with the flange 37 which limits sliding movement of the latch 31 in one direction.

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From the foregoing it is apparent that there has been provided a device which is especially suitable for holding or handling cartons such as cartons of milk.

In use, when the carton such as the carton 10 is to be handled, the frame 28 of the device 27 is positioned as shown in FIGURE 1 so that the frame 28 surrounds the carton 10 and the lower end of the handle 29 engages the outer surface of the carton 10.

The latch 31 includes the tongue 33 which slidably engages the groove 32 in the support portion 30. By manually moving the latch 31 the inclined surfaces 35 and the shoulder 36 can be moved into or out of engagement with the top portion 11 of the carton 10, so that a means is provided for selectively gripping or releasing the carton.

The flange 37 is adapted to engage the stops 38 so as to prevent the latch from being slid clear out of the track when installing or removing the handle assembly from the carton. The latch can be slid clear of the handle for cleaning while it is removed from the carton by sliding it forwardly and out of the groove.

Minor changes in shape, size and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

I claim:

1. In a handling device for a carton with an undercut top, said device including a frame adapted to embrace a carton adjacent the upper end thereof, an upright handle depending outwardly from said frame and having a groove in the upper end thereof, a keeper disposed in an upwardly sloping direction adjacent the upper end of said handle, and a tongue depending from said keeper and slidably received in said groove, said keeper being slidably upwardly and downwardly in said direction, said keeper having its upper end adapted to engage under the undercut top of a carton when in the upwardly slid position and when said frame embraces said carton.

2. In a handling device for a carton with an undercut top, said device including a frame adapted to embrace a carton adjacent the upper end thereof, an upright handle depending outwardly from said frame and having a groove in the upper end thereof, a keeper disposed in an upwardly sloping direction adjacent the upper end of said handle, a tongue depending from said keeper and slidably received in said groove, said keeper being slidably upwardly and downwardly in said direction, and cooperating stop means on said tongue and groove limiting the downward sliding movement of said keeper, said keeper having its upper end adapted to engage under the undercut top of a carton when in the upwardly slid position and when said frame embraces said carton.

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