

[72] Inventor **Patrick D. Charnel**
81 George St., Carteret, N.J. 07088
 [21] Appl. No. **875,786**
 [22] Filed **Nov. 12, 1969**
 [45] Patented **June 28, 1971**

1,142,601	6/1915	Merker.....	222/89
2,089,907	8/1937	Lyons.....	222/89X
2,373,373	4/1945	Berg.....	222/91X
3,181,733	5/1965	Marler.....	222/183X
3,278,083	10/1966	Serafini.....	222/91

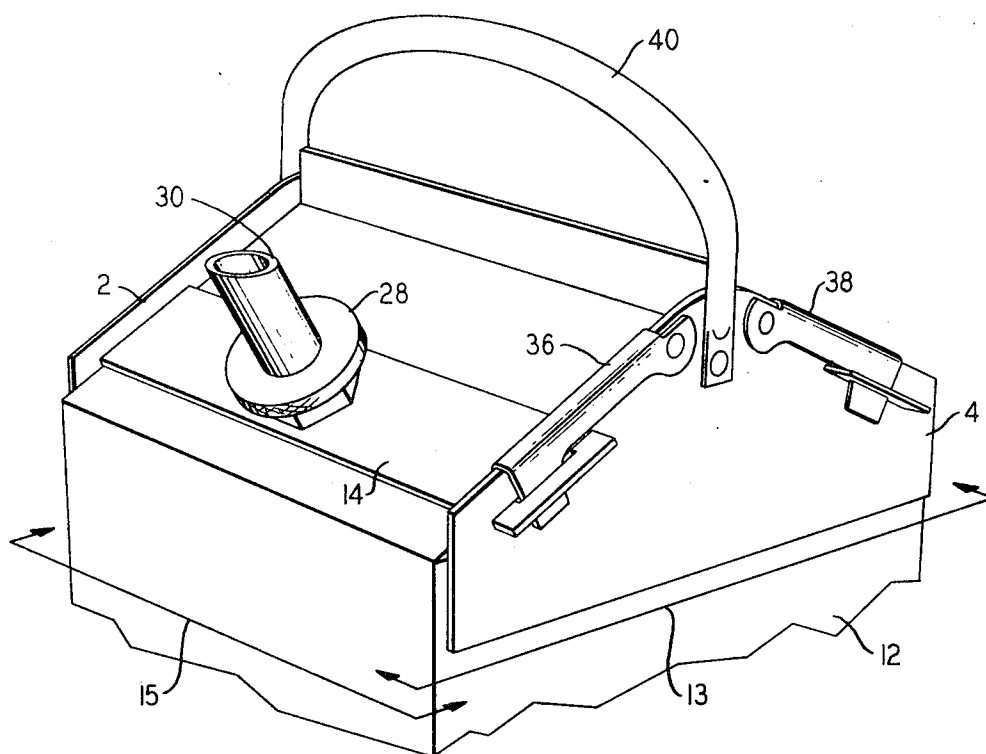
Primary Examiner—M. Henson Wood, Jr.
Assistant Examiner—Edwin D. Grant
Attorney—Roger A. Clapp

[54] **HANDLE AND POURING SPIGOT FOR CONTAINERS**
5 Claims, 5 Drawing Figs.

[52] U.S. Cl..... **222/91**
 [51] Int. Cl..... **B67b 7/26**
 [50] Field of Search..... 222/88, 89, 91, 183

[56] **References Cited**
UNITED STATES PATENTS
 1,006,008 10/1911 Ross..... 222/89

ABSTRACT: A device for carrying milk cartons and the like includes two end plates, each of which in turn, include a wedge-shaped member for inserting into the folds of the milk carton. Two support braces releasably join the end plates to secure the device on the carton. One of the support braces includes a tapped hole into which a pouring spigot may be screwed.



PATENTED JUN 28 1971

3,587,928

SHEET 1 OF 2

FIG. 1

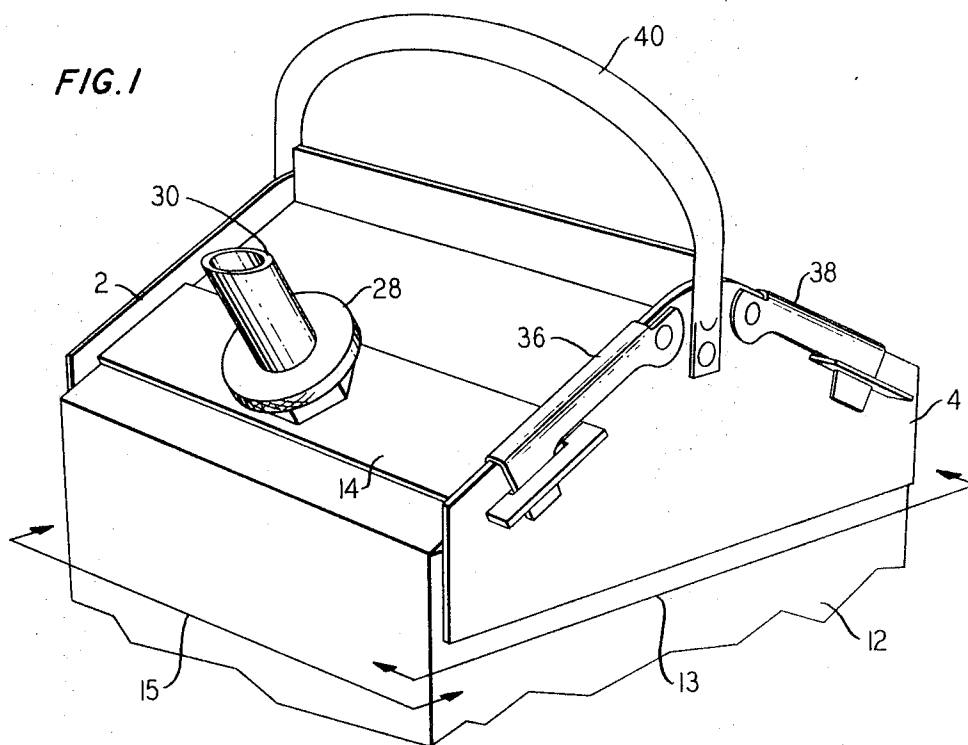
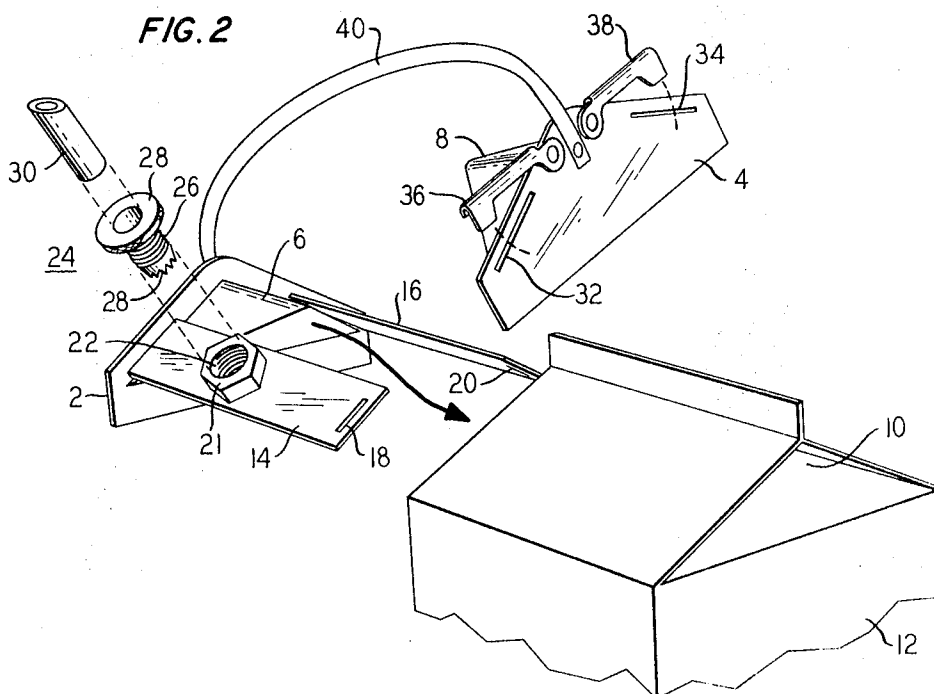


FIG. 2



INVENTOR
P. D. CHARMEL
BY 
ATTORNEY

FIG. 3

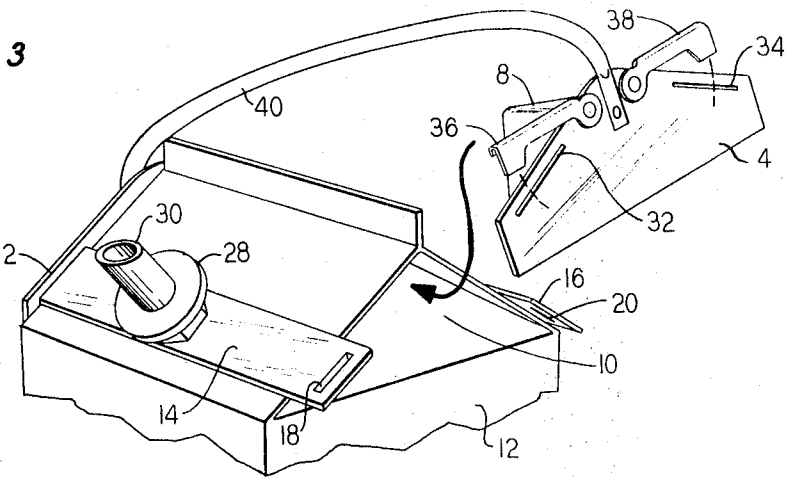


FIG. 4

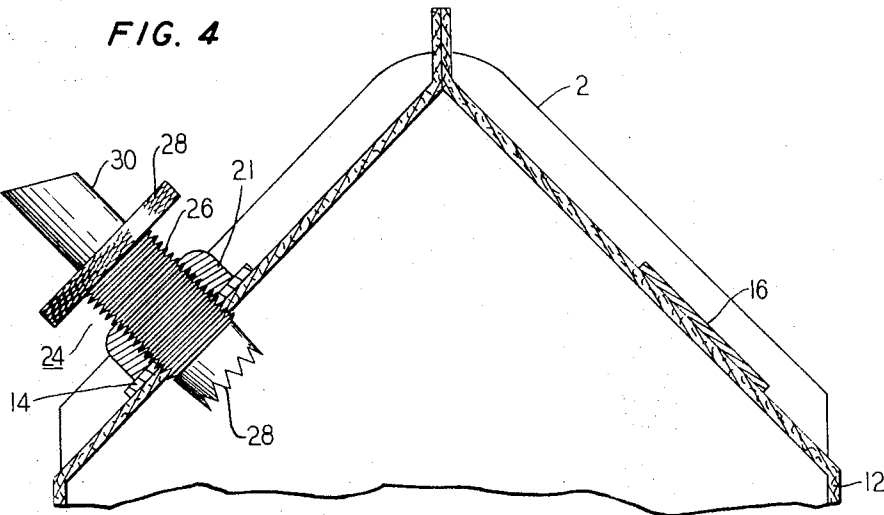
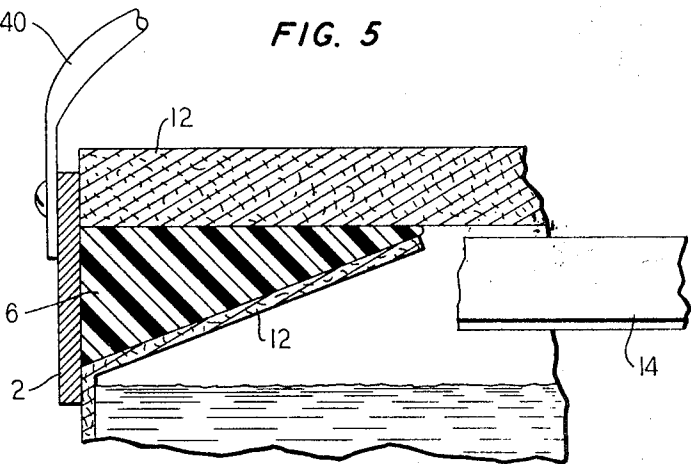


FIG. 5



HANDLE AND POURING SPIGOT FOR CONTAINERS

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to devices for carrying containers such as milk cartons and for enabling the pouring of liquids therefrom.

2. Description of the Prior Art

The milk industry presently distributes and sells a large part of its milk in disposable cardboard containers. While such containers are economical and convenient because of the disposable feature, they are also heavy and bulky and therefore difficult to handle. Pouring of liquids from such containers, especially the gallon-size container, can be very difficult.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide an inexpensive and structurally simple device for use in carrying and handling containers such as milk cartons and the like.

It is another object of the present invention to provide such a device which is easily mountable upon and removable from such containers.

It is still another object of the present invention to provide a device for carrying a container such that the container's center of gravity will be positioned substantially vertically below that portion of the device held by the user when the container is being carried.

Finally, it is an object of the present invention to provide a carrying device which includes a pouring spout which may be inserted into the container to enable the pouring of liquid therefrom.

These and other objects of the present invention are realized in a specific illustrative embodiment which includes two end plates, one of which is affixed to one end of a support brace and the other of which is releasably securable to the other end of said brace. The end plates each further include a wedge-shaped member affixed to the plate and extending substantially at right angles therefrom. The shape of each wedge member conforms to the shape of the indentation of fold located on either side of the upper portion of a typical milk container so as to be insertable therein. The support brace includes a tapped aperture into which a perforating and pouring spigot is screwed. After the device is mounted on a container, the spigot is screwed further into the aperture cutting a hole in the container to enable the pouring of liquid therefrom.

DESCRIPTION OF THE DRAWINGS

The above and other objects of the present invention will become more apparent from the following detailed description made in connection with the accompanying drawings in which:

FIG. 1 is a perspective view showing an illustrative embodiment of the device mounted on a conventional milk container;

FIG. 2 is a perspective view showing the device with its side pieces disengaged in preparation to being mounted on a milk carton;

FIG. 3 is a perspective view showing the device with one of its side pieces mounted on a milk carton;

FIG. 4 is a sectional elevational view looking in the direction of arrow 13 in FIG. 1; and

FIG. 5 is a sectional elevational view looking in the direction of arrow 15 in FIG. 1.

DETAILED DESCRIPTION

An illustrative embodiment of the device of the present invention is shown in FIG. 1 mounted on a conventional milk container. FIG. 1 will be referred to later for purposes of describing this embodiment, but for the present, the details of the embodiment may be better described with reference to FIG. 2. As shown in FIG. 2, the device includes two separate

triangular-shaped end plates 2 and 4. Permanently affixed to each end plate at the bottom edge thereof and extending substantially at right angles therefrom is a wedge-shaped member 6 and 8. The outer surface of each wedge-shaped member is shaped to substantially conform to the shape of the inner surface of the indentations or folds on either side of the upper portion of a conventional milk container of the type having pitched upper surfaces. One such fold 10 of the container 12 is shown in FIGS. 2 and 3.

One end plate 2 further includes two flat longitudinal support braces 14 and 16 extending from the surface of the plate at substantially right angles thereto in the same direction as the wedge-shaped member 6. The two support braces are affixed to the end plate near either of the two upper edges of the plate and above the wedge-shaped member. The bottom surfaces of the braces are pitched so as to lay flat against the sloping upper surfaces of a milk carton on which the device may be mounted.

Near the end of each brace (the end furthest from the plate) are openings 18 and 20. A nut 21 is affixed to the brace 14 near the middle thereof and is positioned over a tapped hole (i.e. a hole having screw threads on the inner surface thereof) in the brace. The threads of the nut 21 and the tapped hole are arranged to form a hole 22 having one continuous set of threads. This hole is designed to accommodate a tubular member 24 having threads 26 on the outer surface thereof. The threads on the member 24 are of the same pitch as the threads in the hole 22 to enable screwing the member into the hole. One end of the tubular member is notched, slotted or the like to provide cutting teeth 28 for use in cutting holes in the milk cartons on which the device is mounted. The threads of member 24 are located at a sufficient distance from the cutting teeth 28 such that as the member 24 is screwed into the hole 22, the cutting teeth commence to protrude below the bottom surface of the support brace 14. At the opposite end of the tubular member (from the cutting teeth) is a circular handle 28 circumscribing the tubular member 24. This handle enables the user to easily screw the tubular member 24 into the and unscrew it from the hole 22.

The inner cavity of the tubular member 24 is fitted with a tubular pouring spout 30 having an outer circumference approximately equal to the inner circumference of the tubular member. The pouring spout may be slid longitudinally along the length of the cavity of the tubular member 24.

The end plate 4 has two rectangular openings 32 and 34 near either of the two upper edges of the plate and of a size and position to enable the insertion therein of the ends of the support braces 14 and 16. The end plate 4 further includes two latches 36 and 38 pivotally affixed to the plate near the upper middle portion thereof. At the end of each of the latches (the end not affixed to the plate) is a finger extending at right angles to the length of the latch and parallel to the outer surface of the plate such that when the latches are pivoted downwardly from a position above the rectangular openings, the fingers pass in front of a corresponding opening.

A flexible carrying strap 40 interconnects the two end plates 2 and 4. Each end of the strap is connected to a different one of the plates at the upper edge thereof. The strap is of sufficient length to allow mounting of the device on a container as will now be generally described below.

As indicated in FIG. 2, end plate 2 is first put in place on the carton 12. The wedge-shaped member 6 of plate 2 is inserted in one of the indentations or folds of carton 12 until the plate is flush against the side of the carton and the support braces are lying flush against the pitched top surfaces of the carton as shown in FIG. 3. While the device is being mounted on the carton, the tubular member 24 is either not in position in the hole 22 or is screwed into the hole such that the cutting teeth 28 are not yet protruding below the bottom surface of support brace 14.

After plate 2 is in place on the carton, end plate 4 is mounted by inserting the wedge-shaped member 8 into the indentation 10 and at the same time inserting the ends of sup-

port braces 14 and 16 into openings 32 and 34 respectively. The fingers of latches 36 and 38 are then pivoted into openings 18 and 20 respectively to secure the device on the carton as shown FIG. 1. The tubular member 24 is screwed into the tapped hole 22 and as the screwing proceeds, the cutting teeth 28 come in contact with the carton wall and through the rotational movement cut a hole in the carton. (In case the disc piece of the carton cut out by the cutting teeth remains within the tubular member after the cutting is completed, the pouring spout may be slid within the tubular member and along its length thereof to push the piece out of the member 24.) The tubular member 24 is then screwed several turns more so that the member extends some distance into the carton to enable pouring the milk therefrom. This is shown in FIG. 4 which is a sectional elevational view of the device looking in the direction of arrow 13 in FIG. 1.

With the device securely mounted on a carton, the carton may be easily handled and carried and milk easily poured therefrom.

FIG. 5 is a sectional elevational view looking in the direction of arrow 15 in FIG. 1 and showing in detail how the wedge-shaped member 6 fits in a milk carton fold. The other wedge-shaped member 8 would be fitted in like fashion in the other fold of the carton to secure the device on the carton.

I claim:

1. A demountable device for carrying milk cartons and other such containers having indented folds on either side of the upper portion thereof and having pitched top surfaces, said device comprising:

first and second triangular-shaped end plates, each of which include a wedge-shaped member affixed to the side of the plate and extending at right angles therefrom and adapted to engage the inner surface of the folds of a said container when inserted therein, said first end plate further comprising at least one longitudinal support member extending at right angles from said end plate and in the same direction as the wedge-shaped member thereof, the end

of said support member being releasably securable to said second end plate, said support member being adapted to secure said end plates in place when the wedge-shaped members thereof are inserted in the folds of a said container and when the end of said support member is secured to said second end plate; and

a flexible carrying strap each end of which is attached to a different one of said end plates.

2. The device of claim 1 wherein said support member includes a tapped aperture and a perforating and pouring spigot adapted to be screwed into said aperture, said perforating and pouring spigot comprising a tubular member having having threads on the outer surface thereof to enable screwing said tubular member into said aperture, one end of said tubular member being notched around its edge to provide cutting teeth suitable for cutting a hole in a said container on which said device is mounted as said tubular member is screwed into said aperture thereby to enable the pouring of liquid from said container through said tubular member.

3. The device of claim 2 wherein said perforating and pouring spigot further includes a tubular pouring spout fitted in the cavity of said tubular member and adapted to be slid longitudinally along the length of said cavity.

4. The device of claim 3 wherein said support member is provided with an opening near the end thereof and wherein said second end plate includes an opening through which the end of said support member may be inserted and a latch having a finger extending from one end and at a right angle to the length of said latch and parallel to the surface of said second plate, the other end of said latch being pivotally affixed to said second end plate to enable pivoting said latch so that said finger interpenetrates the opening of said support member when the end of said support member is inserted through the opening of said second end plate.

5. The device of claim 4 wherein said tubular member further includes a circular handle circumscribing said tubular member at the end opposite said cutting teeth.