US 20160039546A1

(19) **United States**

(12) **Patent Application Publication**

Gardner et al.

(10) **Pub. No.: US 2016/0039546 A1**

(43) **Pub. Date: Feb. 11, 2016**

(54) **CONDIMENT TRANSFER DEVICE AND METHOD**

(71) Applicants: **Greg Gardner**, Arlington, TX (US); **Paul Checkeye**, Arlington, TX (US)

(72) Inventors: **Greg Gardner**, Arlington, TX (US); **Paul Checkeye**, Arlington, TX (US)

(21) Appl. No.: **14/453,627**

(22) Filed: **Aug. 7, 2014**

Publication Classification

(51) **Int. Cl.**

B65B 3/10	(2006.01)
B65B 39/00	(2006.01)
B65B 3/16	(2006.01)

(52) **U.S. Cl.**

CPC ... ***B65B 3/10*** (2013.01); ***B65B 3/16*** (2013.01); ***B65B 39/00*** (2013.01)

(57) **ABSTRACT**

A device and method are disclosed which connects two bulk restaurant condiment bags which allows users to move the food product in one bag into the other, the device comprising a hollow connecting tube sized to fit and secure to the bags.

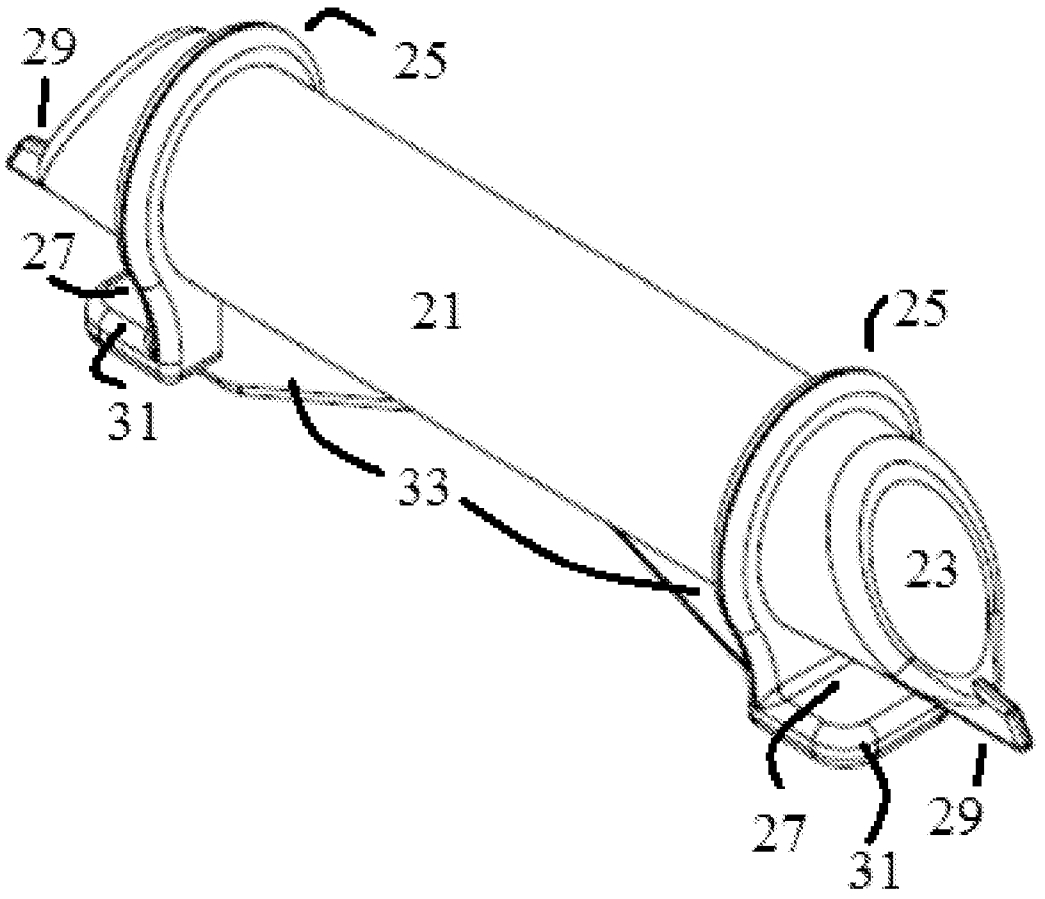


FIG. 1

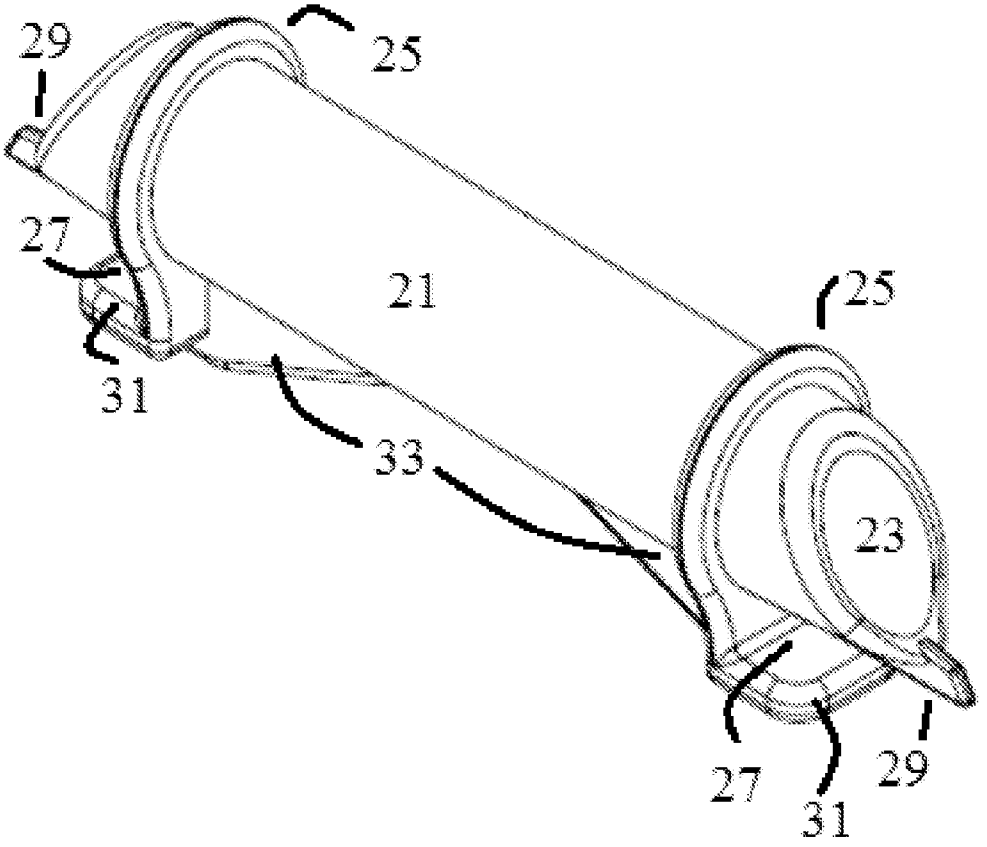


FIG. 2

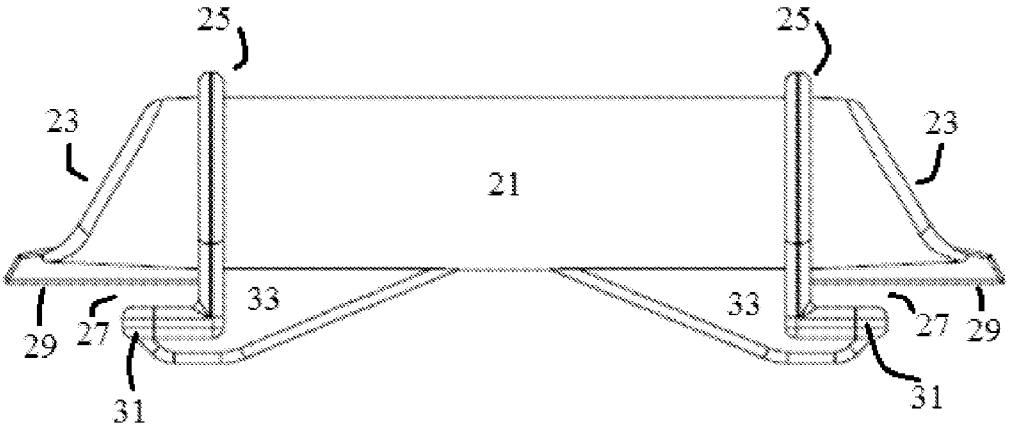


FIG. 3

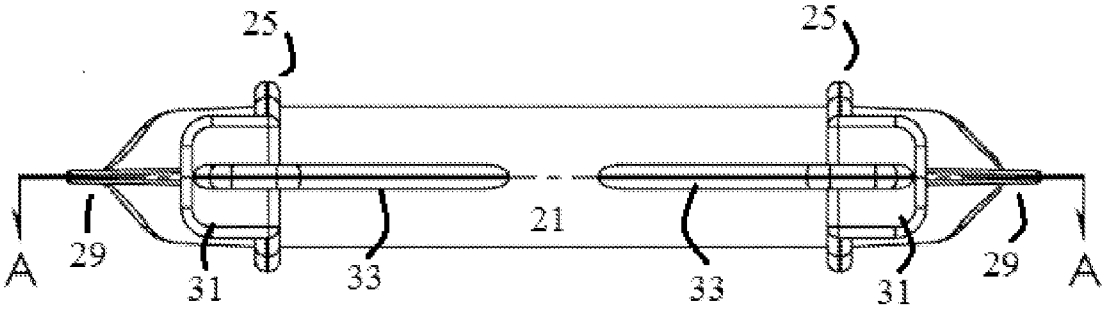


FIG. 4

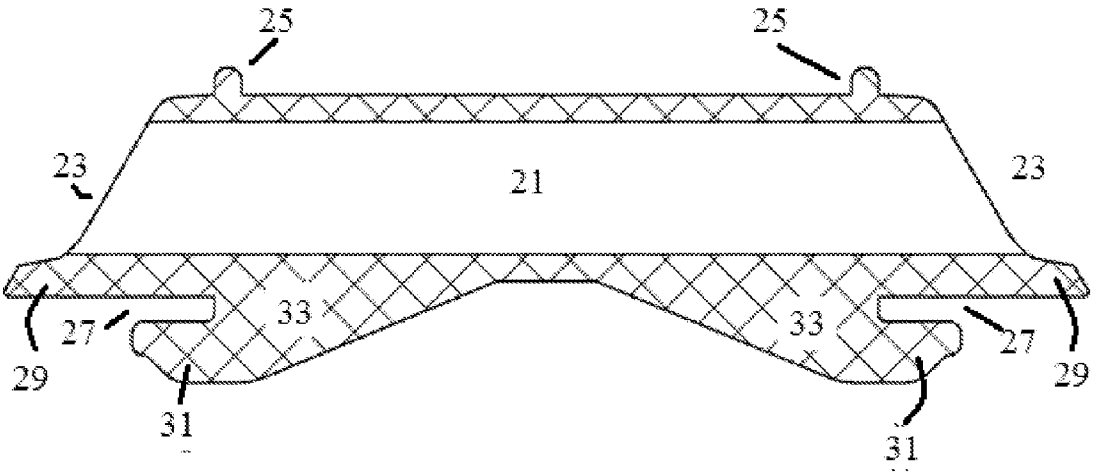


FIG. 5

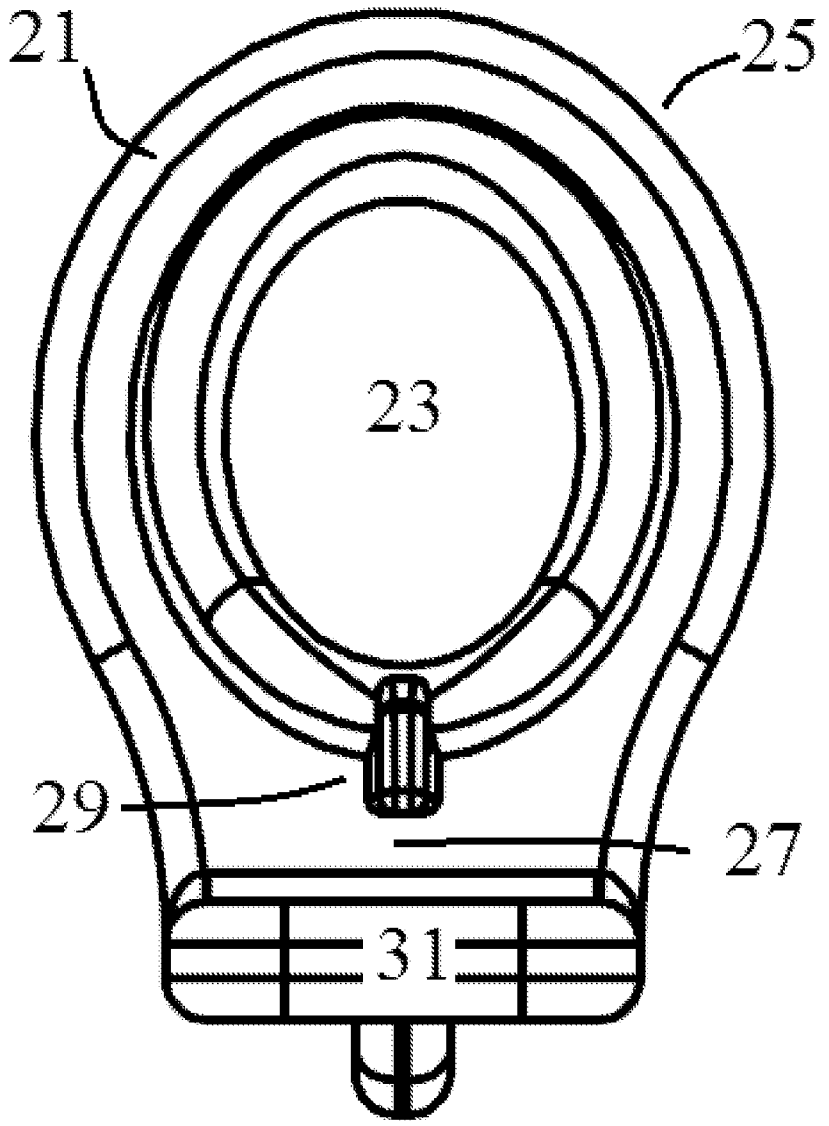


FIG. 6A

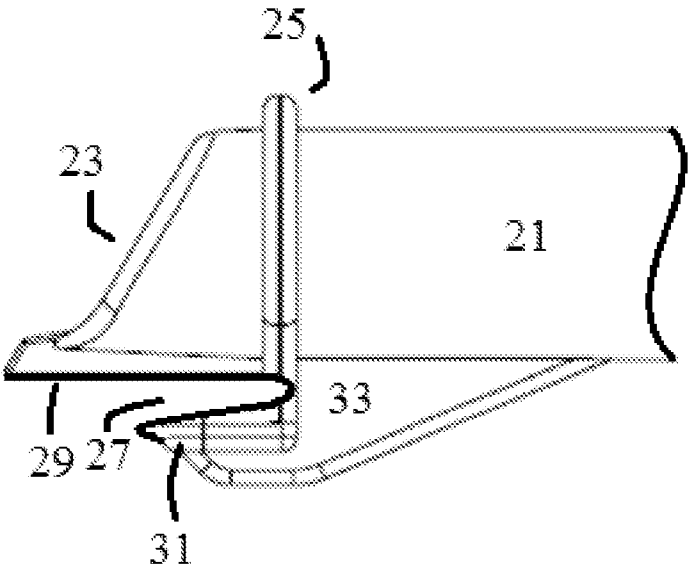
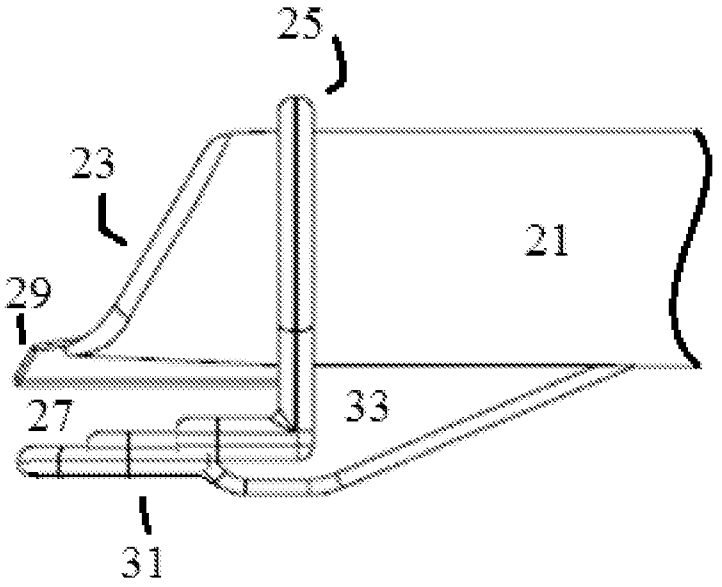


FIG. 6B



CONDIMENT TRANSFER DEVICE AND METHOD

TECHNICAL FIELD OF THE INVENTION

[0001] The present disclosure relates to the consolidation of viscous liquids, including ketchup and other condiments, from one container to another.

BACKGROUND OF THE INVENTION

[0002] Restaurants often have various practices to reduce condiment waste. These methods are typically time-consuming and inefficient.

[0003] For example, restaurants which use glass or plastic bottles with removable tops often instruct their waiters to balance one bottle upside down on top of another matching bottle, so that the ketchup (or other condiment) will gravity feed into the lower bottle. The waiter then repeats that process, emptying several bottles to obtain one full bottle.

[0004] Though the above-mentioned technique is very common, it is replete with drawbacks, including the necessity of watching the bottles as one drains into the other, spillage, or danger of broken glass which occurs when one ketchup bottle might fall off and break on the floor. To mitigate these issues, the hospitality industry has developed several approaches, including the following.

[0005] The Non-Clogging Gravity Transfer Connector for Closed Containers, disclosed in U.S. Pat. No. 4,201,252 and issued on May 6, 1980, is a tube-like structure that connects two condiment bottles. This device would not be successful in connecting non-rigid containers, however.

[0006] The Product Saver, disclosed in U.S. Pat. No. 6,470,928 and issued on Oct. 29, 2002, conveys the contents of a upper bottle to a lower bottle, with fittings between which a butterfly valve controls the flow. Again, this device requires two rigid containers.

[0007] The System for Transferring a Viscous Liquid Between Containers, disclosed in U.S. Pat. No. 7,967,040 issued on Jun. 28, 2011, comprising a pair of transfer lids which attach to two containers and a transfer adaptor that connects the transfer lids for transfer of viscous liquids. This device requires containers that match the lids, and still requires two rigid containers of a limited size.

[0008] Restaurants often use large condiment dispensers which are loaded with a commercial bag holding bulk amounts of condiments. The bags in which the condiments are shipped are set into the dispenser and slowly emptied, and when the dispensing apparatus no longer releases condiment during use, the bags are lifted and replaced, with any remaining condiment within the mostly empty bag simply thrown away with the bag.

[0009] The hospitality industry needs a way to better consolidate the remains of commercial bulk product bags.

SUMMARY OF THE INVENTION

[0010] The present disclosure includes an apparatus and method by which commercial restaurant employees can easily consolidate viscous condiments without any danger of spillage, broken glass, or time-intensive baby-sitting of precariously arrange glass bottles.

[0011] The invention consists of a device that connects two commercial bulk condiment bags, allowing the contents of one bag to flow smoothly into the other, reducing waste.

[0012] Novel and inobvious aspects of the invention comprise a device and method of eliminating food waste by transferring food from one flexible container to another. Other features and advantages of the present disclosure will be apparent to those of ordinary skill in the art upon reference to the following detailed description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] For a better understanding of the disclosure, and to show by way of example how the same may be carried into effect, reference is now made to the detailed description along with the accompanying figures in which corresponding numerals in the different figures refer to corresponding parts.

[0014] FIG. **1** shows an orthogonal view of one embodiment of the invention.

[0015] FIG. **2** shows a side view of the embodiment of the invention shown in FIG. **1**.

[0016] FIG. **3** shows a bottom view of the embodiment of the invention shown in FIG. **1**.

[0017] FIG. **4** shows a cross sectional side view of one embodiment of the invention along the A-A lines shown in FIG. **3**.

[0018] FIG. **5** shows a front view of the embodiment of the invention.

[0019] FIG. **6**A is a cut-away side view showing an optional angled Bag Grip construction.

[0020] FIG. **6**B is a cut-away side view showing an optional ratcheted Bag Grip construction.

DETAILED DESCRIPTION OF THE INVENTION

[0021] While the making and using of various embodiments of the present disclosure are discussed in detail below, it should be appreciated that the present disclosure provides many applicable inventive concepts, which can be embodied in a wide variety of specific contexts. The disclosure is primarily described and illustrated hereinafter in conjunction with various embodiments of the presently-described systems and methods. The specific embodiments discussed herein are, however, merely illustrative of specific ways to make and use the disclosure and do not limit the scope of the disclosure.

[0022] As shown in the figures, the current embodiment comprises a hollow Connecting Tube **21**, in which each open End **23** of the Tube **21** is angled. Near each End **23** is a Mounting Ridge **25** that encircles the exterior of each Tube **21** that strengthens the Tube **21** and makes it more rigid. In this embodiment, an Interior Side **29** is formed along the Tube **21** between the Mounting Ridge **25** and the tube's End **23**. An Exterior Side **31** is formed as an extension from the Connecting Tube **21** that mirrors the Interior Side **29** and provides added rigidity to the Tube **21**. The Interior Side **29** and Exterior Side **31** pairing near each End **23** form a Bag Grip **27**, a narrow opening that a user employs to connect the Tube **21** to a bag. The resulting construction allows a user to connect a bag to each End **23** of the Tube **21**.

[0023] In the current embodiment, the Tube **21** also contains a extended Tube Reinforcement **33** between the Mounting Ridges **25**. As shown in FIG. **2**, this embodiment uses a roughly triangular-shaped Tube Reinforcement **33**, but a Tube Reinforcement **33** can be formed of any shape, including a straight reinforcement element that stretches across the Tube **21** between the Mounting Ridges **25**.

[0024] Commercial condiment bags (used to dispense ketchup, mustard, and mayonnaise, among other food stuffs) are often flexible bags which fit into a dispensing container and attach to the container so that restaurant customers press a lever that in turn, dispenses condiment through an exit portal that is used in the dispensing operation to release the condiment.

[0025] The invention takes advantage of the commercial bag portal by connecting the rigid ring that typically surrounds the portal to the Connecting Tube **21**. The user connects the Tube **21** to a dispensing bag by simply placing the tube's End **23** into the portal, twisting the Tube **21** in relation to the bag so the bag's portal ring is pressed into the Bag Grip **27** formed between the Interior Side **29** and Exterior Side **31** of the Tube **21**.

[0026] The invention includes Ends **23** that are angled to more easily be placed into the food bags, but the sloping of the Ends **23** is optional.

[0027] Once a user has connected a bag to each end of the Tube **21**, the user merely squeezes one of the bags, causing food material within the bag being squeezed to flow into the other bag connected to the Tube **21**. The Bag Grip **27** is constructed so a friction connection formed between the food stuff portal ring and the Interior Side **29** and Exterior Side **31**.

[0028] Once the user is finished transferring food from one bag to the other, the user simply disconnects the Tube **21** from the bag, typically using a pulling motion, or a pulling and twisting motion between the bag and Tube **21**.

[0029] The embodiment of the device as built is constructed to allow for an optimum fit for one size of portal ring, but the device can be made to fit multiple sizes by using a decreasing or ratcheted optional Bag Grip **27** construction, as shown in FIGS. **6**A and **6**B, respectively.

[0030] All embodiments described herein are presented for purposes of illustration and explanation only. These descriptions of one embodiment are not intended to be limiting to the embodiments described. Those skilled in the relevant art will be able to create other embodiments based on this disclosure and the claims that are attached with this application.

The inventor claims:

1. A device for transferring a viscous liquid from one container to another, comprising:

a. a hollow tube with open ends, and

b. a means for connecting each tube end to a container.

2. A device as in claim **1** in which a tube opening is cut at an angle, such that the opening of the hollow tube forms an acute angle to the plane tangent to the tube along its longest extent of the tube at the tube opening.

3. A device as in claim **2** in which both tube openings are similarly cut such that the angled openings are mirrors of each other.

4. A device as in claim **1**, with the additional limitation that the means for connecting each tube end to a container comprises a raised extruded ring over which a bag's opening may be fixed tightly enough to hold the bag over the ring.

5. A device as in claim **1**, with the additional limitation that the means for connecting each tube end to a container comprises a bag grip into which a bag can be fixed using a frictional connection.

6. A device as in claim **5**, in which the bag grip frictional connection is angled to accept different sizes of bag portals.

7. A device as in claim **5**, in which the bag grip frictional connection is ratcheted to accept different sizes of bag portals.

8. A device as in claim **4**, in which the tube is reinforced by a raised extrusion element between the raised extruded rings.

9. A method of consolidating a viscous condiment between flexible bags, comprising the following steps:

a. pushing one end of a two-ended hollow tube into an opening of a first bag;

b. pushing the second end of a two-ended hollow tube into the opening of a second bag;

c. squeezing one of the two aforementioned bags such that the viscous fluid in one bag is pressed out of the bag, through the tube, and into the second bag; and

d. disconnecting the bags from the tube.

10. The method of claim **9**, comprising additional limitations as follows:

a. pushing one end of a two-ended hollow tube into an opening of a first bag;

b. fixing the first bag onto a bag grip mounted on the aforementioned hollow tube end;

c. pushing the second end of a two-ended hollow tube into the opening of a second bag;

d. fixing the second end of a bag onto a bag grip mounted on the aforementioned second end of the hollow tube;

e. squeezing one of the two aforementioned bags such that the viscous fluid in one bag is pressed out of the bag, through the tube, and into the second bag; and

f. disconnecting the bags from the tube.

* * * * *