

[54] CITRUS FRUIT SQUEEZER

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[51] Int. Cl. B30b 5/02

[58] Field of Search 146/3.9 J, 3 C, 3 J; 241/169; 100/234, 233, 133, 211; D89/1.1

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Primary Examiner—Peter Feldman

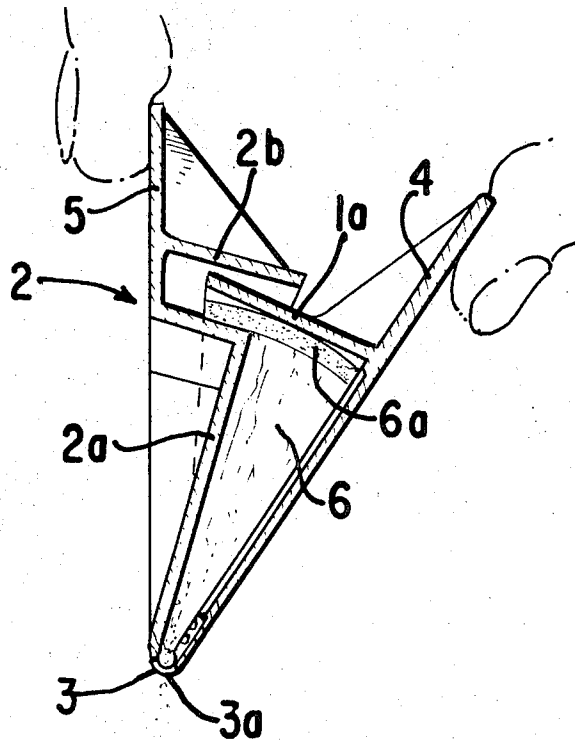
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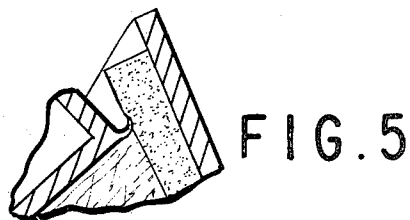
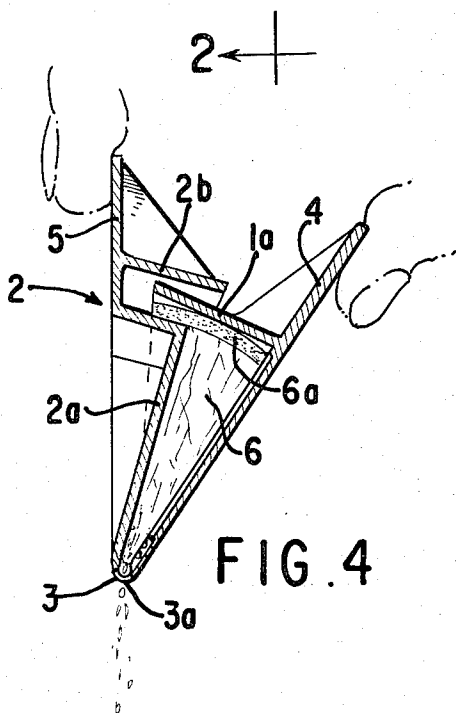
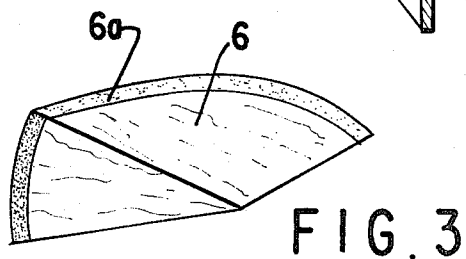
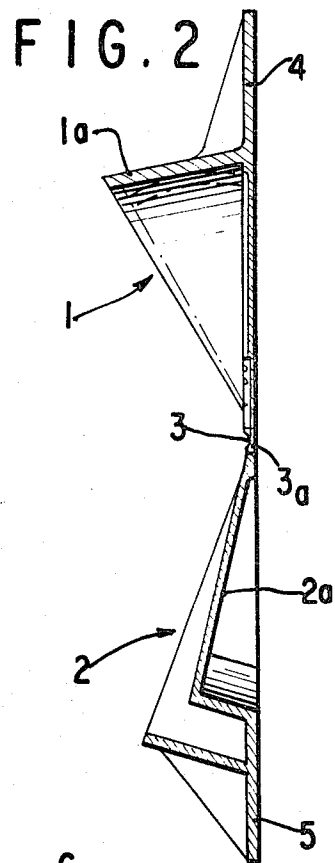
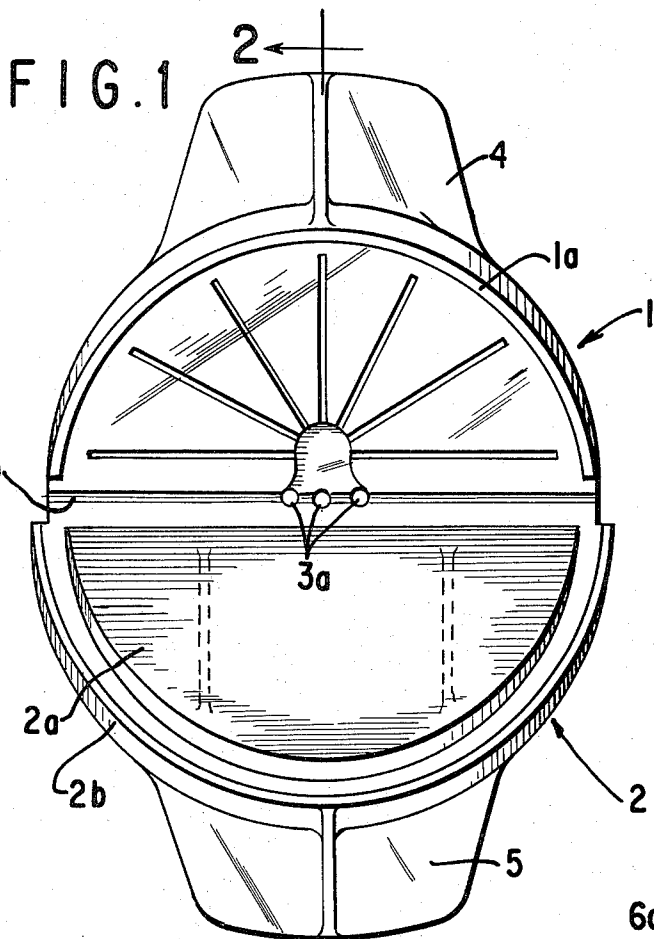
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ABSTRACT

A disposable one piece plastic container for a cut piece of citrus fruit which comprises a hinge member integrally connecting two semi-circular parts, each having a semi-circular rim around the outer semi-circular portion thereof, one of said parts having a semi-circular raised portion with walls parallel to one of said semi-circular rims to enter the cut piece of fruit inside the rind, the semi-circular rim on the other semi-circular part, entering the channel formed between said parallel parts to prevent backflow of the fruit juice, and an opening in said plastic hinge member.

2 Claims, 20 Drawing Figures





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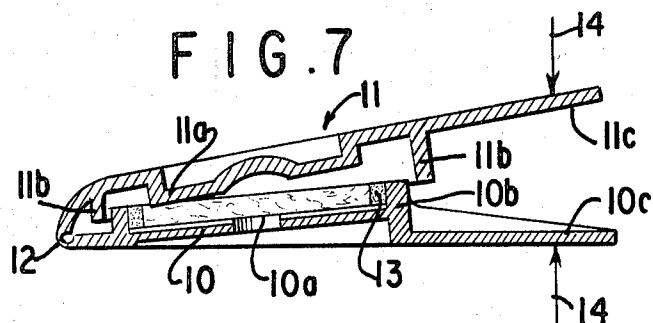
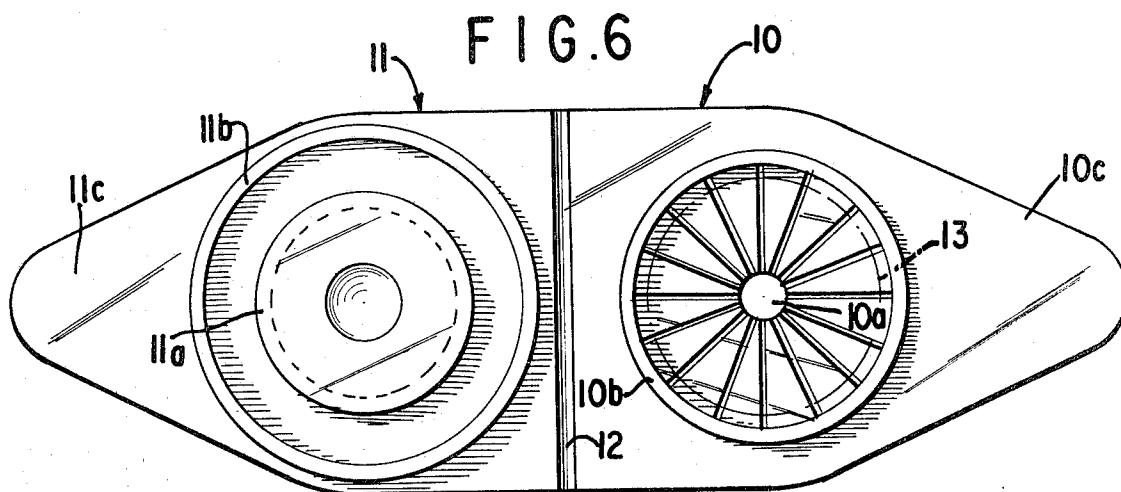


FIG. 8

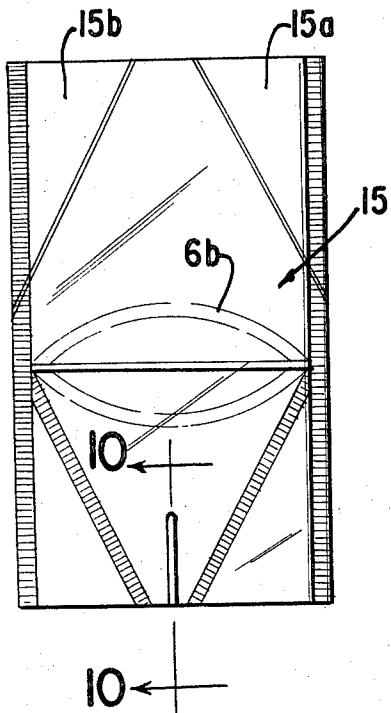


FIG. 9

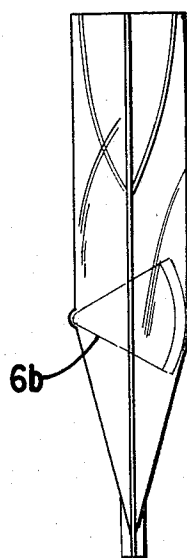


FIG. 10

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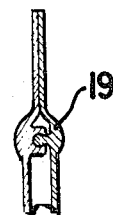
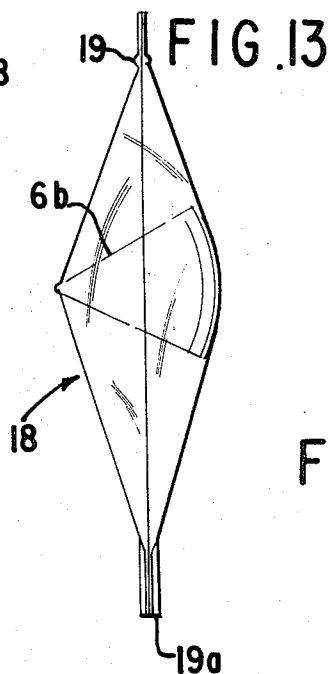
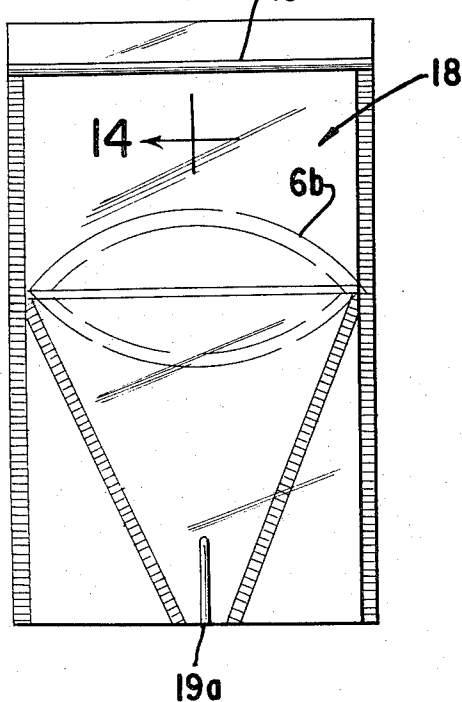
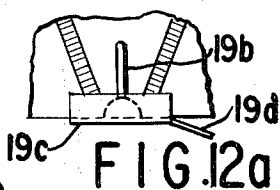
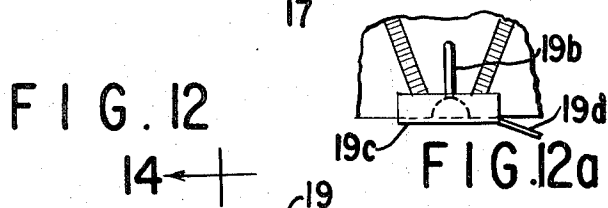
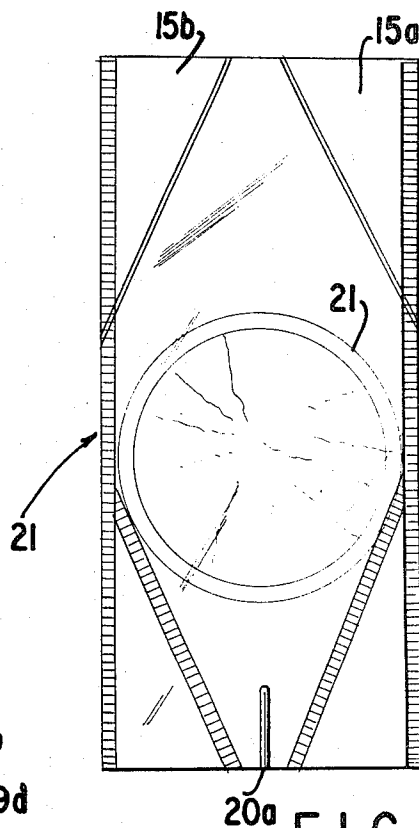
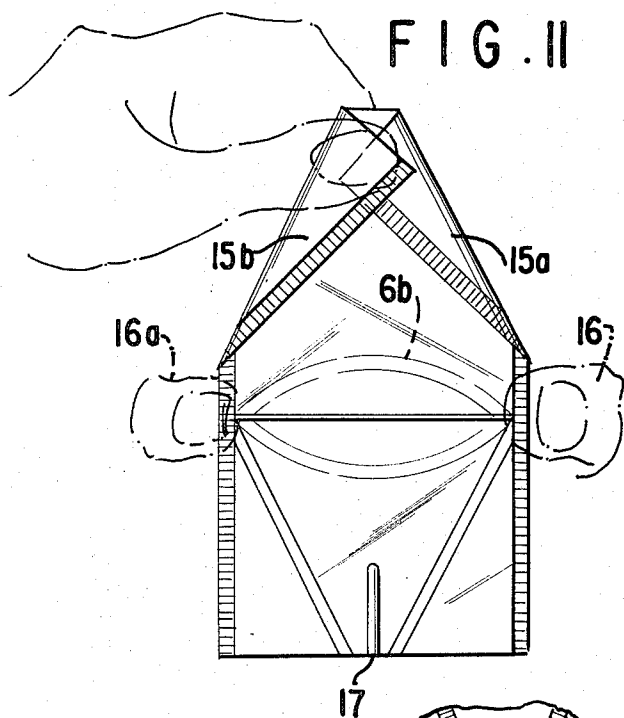


FIG. 14

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FIG. 16

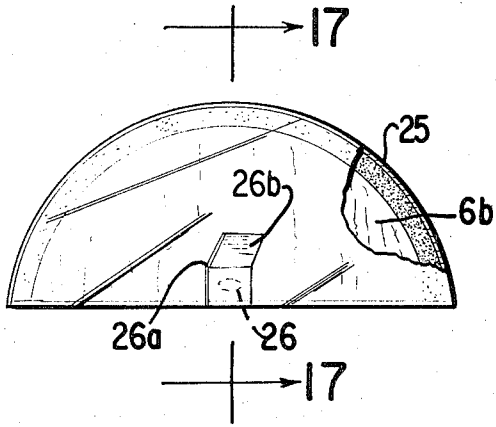


FIG. 17

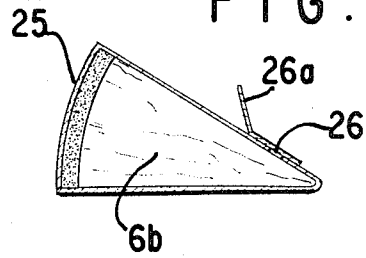


FIG. 18

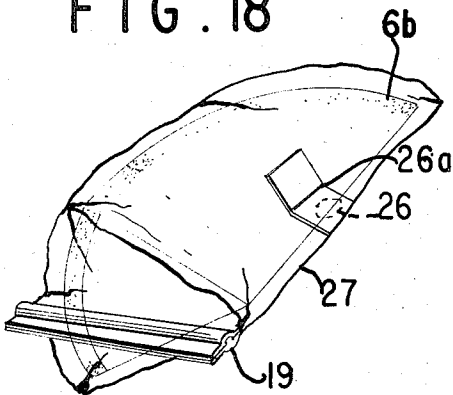
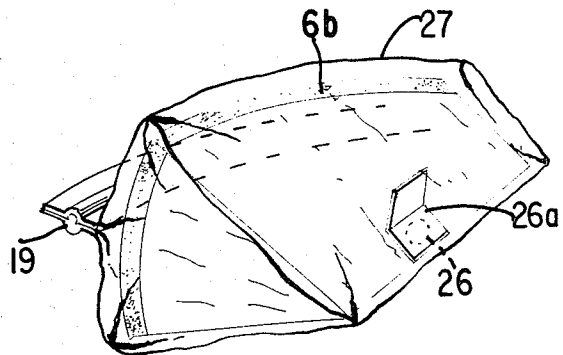


FIG. 19



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CITRUS FRUIT SQUEEZER

This invention relates to devices for serving juice from lemons, limes, oranges and other citrus fruits so as to avoid the juice squirting in unwanted directions and soiling the tablecloth and hands of the server or user. Cut lemons, oranges and other citrus fruits are customarily served with tea, fish and other foods and beverages and when squeezed to deposit the juice from the fruit onto the foods or into beverages, the juice often squirts on other people at the table and over the tablecloth and hands of the user and a great deal of the juice is wasted.

Prior juice squeezers have usually been made of metal or other rigid materials. They are usually made of many separate and easily breakable parts, are expensive to make and difficult to clean for re-use.

It is one of the objects of this invention to provide a juice squeezer which will prevent the juice from squirting in unwanted directions and insure that the juice is deposited in the beverage or on the food for which it is intended without simultaneously depositing seeds from lemons, oranges or other citrus fruits in the food or beverage being served.

Another object of the invention is to provide a juice squeezer made entirely of food-grade plastic materials such as, for example, polypropylene, Saran wrap or other materials which are cheap to construct and can either be easily cleaned for re-use or of such low cost as to permit discarding after one use.

Another object of the invention is to provide a juice squeezer which is free of metal parts which might break, tarnish or be difficult to clean.

Another object of the invention is to provide a juice squeezer which will prevent contamination of the citrus fruits being squeezed and prevent soiling the user's hands, tablecloths, napkins or other adjacent tableware.

Another object of the invention is to provide a plastic juice squeezer with an integral plastic hinge connecting the parts of the squeezer together.

Another object of the invention is to provide lemon, lime or orange wedges or slices completely enclosed in a discardable plastic container which will protect the citrus fruit contained therein from oxidation, contamination by the hands of waiters and contaminants from the air until the juice from the cut citrus fruit is served into the beverage or onto the food for which it is intended.

Various other objects and advantages of this invention will appear as this description proceeds.

Referring now to the drawings:

FIG. 1 is a perspective plan view of a one piece plastic citrus fruit squeezer;

FIG. 2 is a sectional view along the line 2 — 2 of FIG. 1;

FIG. 3 is a perspective view of a portion of a lemon wedge;

FIG. 4 is a cross sectional view showing a lemon wedge being squeezed in the squeezer illustrated in FIGS. 1 and 2;

FIG. 5 is a further detail view;

FIG. 6 is a plan view of an embodiment for squeezing juice from a round slice of lemon, lime, orange or the like;

FIG. 7 is a cross sectional view of the device of FIG. 6, partially closed;

FIG. 8 is a plan view of a cellophane bag or other plastic enclosure adapted to enclose a lemon wedge to be squeezed;

FIG. 9 is a cross sectional view of the squeezer illustrated in FIG. 8;

FIG. 10 is a sectional view along the line 10 — 10 of FIG. 9;

FIG. 11 is another view of the cellophane enclosure illustrated in FIG. 8;

FIG. 12 is a further modification showing a plastic seal on the plastic enclosure;

FIG. 12a is a detail view showing an opening in a cellophane enclosure covered by a removable tab, for discharging juices from the fruit;

FIG. 13 is a side view of the device of FIG. 12 in closed position;

FIG. 14 is a sectional view on the line 14a — 14a of FIG. 12;

FIG. 15 shows a similar embodiment intended for use with a round slice of lemon, lime or orange;

FIG. 16 shows a lemon wedge enclosed in a sprayed on, dipped on or shrunk on plastic coating;

FIG. 17 is a cross sectional view along the line 17 — 17 of FIG. 16;

FIG. 18 is a perspective view of a plastic envelope, with a plastic seal, for enclosing the fruit to be squeezed; and

FIG. 19 is a further embodiment of the plastic envelope of FIG. 18.

In the embodiment illustrated in FIG. 1, the squeezer consists of two integrally connected semi-circular plastic parts 1 and 2, connected together by an integral hinge 3. Handles 4 and 5 permit the parts 1 and 2 to be closed together around the hinge 3 which is provided with openings 3a through which the juice from the fruit can flow when the parts 1 and 2 are squeezed together on a slice of fruit such as a lemon wedge 6.

The part 1 is provided with a semi-circular rim 1a against which the back of the lemon wedge 6 rests and part 2 is provided with a raised portion 2a which enters the lemon wedge inside the rind 6a and squeezes against the pulp of the fruit when the sections 1 and 2 are squeezed together as illustrated in FIGS. 4 and 5. The rims 1a and 2b surround the wedge 6 and prevent the juice being squeezed out from the rear or sides of the squeezer. By virtue of the integral plastic hinge 3 and the fact that the parts 1 and 2 can be opened as is illustrated in FIGS. 1 and 2, this embodiment of the lemon squeezer may be readily cleaned by steam cleaning, plunging it into warm water or other cleaning solution and the device re-used if desired. It can also be made cheaply enough for discarding after a single use if desired.

In the embodiment illustrated in FIGS. 6 and 7, the two sections 10 and 11 are connected together by an integral plastic hinge 12 and are adapted to take a round section or slice of citrus fruit 13 for squeezing between the sections 10 and 11. The section 10 is provided with a hole 10a through which the juices flow out and the section 11 is provided with a raised portion 11a which squeezes against the pulp section of the fruit slice 13 to squeeze the juice from it. The overlapping rims 10b and 11b surround the fruit slice 13 and prevent the juices from escaping around the rims of the squeezer. Handles 10c and 11c permit the squeezer to be squeezed together between the thumb and finger as indicated by the arrows 14 in FIG. 7.

FIG. 8 illustrates a substantially rectangular envelope of cellophane, Saran wrap or other food-grade plastic 15 adapted to receive a citrus fruit wedge 6b in substantially the middle of the envelope 15. After the wedge 6b is inserted in the envelope, the flaps 15a and 15b are folded over to provide a wedge-shaped construction as illustrated in FIG. 11, which prevents the fruit juice from being squeezed out of the top of the envelope or enclosure 15, after which, the lemon or orange wedge 6b is squeezed between the thumb and finger 16 and 16a as illustrated in FIG. 11, to discharge the juice through the opening 17 formed in the bottom of the envelope 15.

FIG. 12 illustrates a similar envelope 18 provided with a pressure closing seal 19 to prevent the juice of the wedge of citrus fruit from escaping upwardly from the envelope 18. A hole 19a in the bottom of the envelope permits juice from the fruit wedge 6b to drip into a beverage or onto a portion of food to be served. FIG. 12a illustrates a modified type of juice discharge opening in which an opening 19b is formed with a removable tab closure 19c which can be removed by pulling the tab 19d when the juice from a wedge 6b is to be squeezed out.

FIG. 14 shows a detail of the pressure closing seal 19, and FIG. 13 is a side view of the envelope of FIG. 12, showing the lemon wedge 6b inside the sealed envelope in position to be squeezed between the thumb and finger to cause the juice to flow through the opening 19a or 19b.

FIG. 15 shows an envelope enclosure 20 essentially similar to that described in connection with FIG. 8, adapted to receive a round slice of lemon, lime or orange 21 from which the juice is squeezed through the opening 20a after the top of the envelope is closed, as described in connection with FIG. 11.

FIG. 16 shows a wedge of citrus fruit 6b which has been dip-coated or sprayed with a self-congealing coating or shrink wrap 25 of a food-grade plastic, such as polypropylene, cellophane or the like, so that the wedge is completely surrounded by the tightly adhering plastic coating 25. After the wedge 6b has been completely surrounded by the self-congealing plastic coating or shrink wrap, a hole 26 is punctured through the plastic and a temporary removable closure 26a having a pull tab 26b is placed over this hole. When the juice is to be squeezed from the wedge 6b sealed in the plastic envelope 25, the seal 26a is removed from the opening by pulling the tab 26b and the wedge 6b inside the plastically sealed closure is squeezed to discharge the juice into a beverage or onto food from the hole 26, whereupon the sealed wedge together with the covering is discarded. The embodiment of FIG. 16 permits wedges or slices of citrus fruits to be completely enclosed in an airproof plastic container and protects the sliced citrus fruit wedge or round section from contact with the hands or the atmosphere until it is served in the manner described above. This embodiment of the invention is particularly adapted for use in bars or restaurants where the citrus fruit wedge is protected from contamination from the atmosphere or from the bartenders' hands until the juice is squeezed into the drink being served.

The sliced fruit can be enclosed in the plastic container illustrated in FIG. 16 at a central factory and sold to bars, restaurants or the like, so that slicing on the premises is no longer necessary and the juice from the citrus fruit can be served without contact with the user's hands and without danger of it squirting in undesired directions.

FIGS. 18 and 19 illustrate a citrus fruit wedge 6b enclosed in

a plastic envelope 27 provided with a pressure closing seal 19 similar to that illustrated in FIG. 14. A hole 26 is formed in the envelope 27 and a pull tab closure 26a seals the hole 26 until the juice is to be squeezed from the wedge 6b. At this time, the pull tab closure is removed, the juice is squeezed out through the opening 26 and the plastic envelope 27 with the wedge 6b inside is discarded, without the hands coming in contact with the wedge 6b.

The squeezers illustrated also prevent the slices of cut citrus fruit from slipping out of the hands of the user and dropping into the tea cup, glass or onto the tablecloth, etc.

While certain embodiments of my invention have been illustrated, it will be understood that other embodiments and those specifically illustrated may be used within the spirit of my invention.

What is claimed is:

1. As a product of manufacture, a cut piece of fruit from which juice can be squeezed, enclosed in a one piece plastic container having a plastic hinge member integrally connecting two semi-circular plastic parts, each having a semi-circular rim around the outer semi-circular portion thereof, one of said parts having a semi-circular raised portion with walls parallel to one of said semi-circular rims to enter the cut piece of fruit inside the rind, the semi-circular rim on the other semi-circular part, entering the channel formed between said parallel parts to prevent backflow of the fruit juice, protruding plastic handles outside said rims, and a juice squeezing opening in said plastic hinge member.

2. The product of claim 1, in which the juice squeezing opening is provided with a removable temporary seal.

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