EXTRACTION PACKAGE FOR INFUSION MATERIALS

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1 Claim. (Cl. 95—287)

This invention relates generally to the art of packages or containers for infusion commodities, such as tea, coffee, hops, etc., and is directed to a new and improved pervious bag and harness combination.

Tea bags per se are well known and have been used for many years. However, their use has been limited due to numerous inherent disadvantages and shortcomings. One of these disadvantages is that tea bags heretofore available did not provide an acceptable and adequate means of extracting the liquid from the bag. It is common practice for the user to remove the pervious bag from the liquid in a cup and place it in the saucer. Without adequate means to extract the liquid, a certain amount flows from the bag into the saucer. This gives an unsightly appearance but more importantly it drips on the user when the cup is lifted from the saucer. Further, by not extracting the water from the bag completely, the flavor and aroma, etc., of the material in the bag is not fully utilized. Numerous attempts have been made to overcome these disadvantages but none have been completely successful.

The consumption of infusion commodities has been limited for the lack of a pervious bag which allows the infusion process to take place and which provides a simple and effective means for extracting the liquid from the bag.

It is therefore an object of the invention to provide a string and pervious bag combination, with the string arranged in a manner so that the user may extract the liquid from the bag easily, quickly, conveniently and neatly, without squirting or splattering the liquid.

Another object of the invention is to provide a pervious bag and string combination that is simple and inexpensive and yet very effective in extracting substantially all of the liquid from the bag thereby to utilize efficiently the flavor, the aroma, and the color from the contents of the bag.

Another object of the present invention is to provide a pervious bag with a flexible string harness arranged therewith so that upon removing the bag from the hot water, different segments of the string may be pulled, thereby extracting the liquid from the bag, carrying with it the flavor, color, and aroma imparted thereto by the contents of the bag.

Another object of the invention is to provide a new and improved pervious bag and string combination requiring a length of flexible string only a fraction longer than that used for the conventional tea bag.

A still further object of the invention is to provide a new and improved pervious bag and string harness combination wherein the advertising tag or card, as found on conventional tea bags, is so arranged with and fastened to the string that it assists in separating the strings so that same may be grasped and pulled easily, thereby extracting the liquid from the bag.

Another object of the invention is to provide a new and improved pervious bag and string harness combination requiring no more staples or fastening devices than used on a conventional tea bag.

A further object of the invention is to provide a new and improved pervious bag and string harness combination wherein two strands of string extend from the advertising tag or card, around the bag, thereby to promote rotation of the bag.

The invention will be described in detail with reference to the accompanying drawings in which:

FIG. 1 is a plan view of a new and improved pervious bag and string harness prior to immersion in hot water;

FIG. 2 is a side view of the new and improved pervious bag and harness before it is immersed in the water;

FIG. 3 is a front plan view of the tea bag after the infusion process has taken place and the bag has been lifted from the water;

FIG. 4 is a side view of the new and improved pervious bag and string harness after it has been removed from the hot liquid, and illustrating the compressing action of the string on the bag to extract the water and flavor therefrom.

Like reference characters refer to corresponding elements throughout the drawings.

Referring to the drawings in detail, FIG. 1 shows a porous bag generally indicated by 1, to which is attached a string harness indicated generally by 2. The string may be conventional cotton string or of any other material so long as a flexible cord or string is used. Attached to the string 2 is an advertising card or tag 3 such as found on a conventional tea bag. As shown in the drawings, the string 2 is of a single piece and extends downwardly from one side of the card 3, around the tea bag, and up to the other side of the card 3. The respective free ends being disposed on opposite sides of the card 3 are fastened thereto by a single staple 4. With the string harness, or loop extending downwardly from the card and around the bag, the bag is essentially suspended from the card.

At an intermediate portion of the harness and at the top of the pervious bag, another faster or staple 6 extends through the tea bag and slidably fastens the string to opposite sides of the top peripheral portion of the tea bag.

The bag itself may be of a substantially conventional design, consisting of a marginal or peripheral portion 8 and a central cavity or hollow portion 10 containing an infusion commodity, such as tea, for example. The material from which the bag is made may be paper or any suitable porous material that will allow water or any solvent to circulate about the infusion commodity.

The new bag, however, has a notch 12 on the lower peripheral portion of the bag to restrain the string harness from laterally sliding or shifting along the bottom of the bag.

In packaging the new device, the card or tag 3, along with both free ends of the string fastened to the opposite sides thereof, may be folded back upon the tea bag and around the tea bag with one extremity of the string as indicated at 14, being inserted under staple 6. In this manner, staple 6 contains the single strand of cord at three different points along its length. To utilize this packaging technique either one of both of the extremities of the string extends slightly beyond the card or tag.

The two strands of string tend to twist together as the bag is raised and lowered from the liquid. This imparts a rotary movement to the bag which functions to promote the infusion process. With the bag having a rotary movement as well as an up and down movement the circulation of the liquid around the infusion commodity is improved. This two-way or double motion of the bag allows a more efficient utilization of the infusion commodity.

Referring now to FIG. 3, which illustrates the bag after it has been removed from the hot liquid, and how tag 3 is tilted or rotated slightly to separate the respective strands of the string 2. Since the string is fibrous in nature and extends into the liquid, the strands tend to stick together. By merely tilting the tag, the string portions are separated and become readily accessible to be grasped by the user. In order to achieve this result, it is necessary that the respective strands of the string be
fastened to the tag at a point such that the tag extends between the strings for a substantial distance from the point of fastening. By fastening the string to the tag or card in this manner the card, when tilted or rotated, acts in the nature of a wedge between the strands. After having separated the strands as illustrated in FIGURE 3, the user grasps the respective strands and pulls them in opposite directions.

Upon so pulling the respective strands, either one or both of the strands will slide through the fastener or staple 6 resulting in a shortening or contraction of the portion of the string surrounding the pervious bag. Upon shortening of the string surrounding the bag, the bag is compressed and the liquid therein is extracted therefrom, carrying with it the flavor, color, and aroma of the contents.

It should be noted that the notch 12 in the lower peripheral portion of the pervious bag functions to restrain lateral shifting of the string and retain same substantially in the center of the bag before and during the time when the strings are pulled to compress the bag. By retaining the string substantially in the center of the bag, it is more effective in extracting the liquid therefrom than if it were to slip closer to one side or the other. Should it slip off the way, it would be substantially ineffective in removing the liquid from the bag.

Certain modifications of the invention obviously may be made without departing from the spirit thereof. Accordingly, the invention is limited only by the scope of the attached claim.

What is claimed is:

3. A container for infusion commodities comprising a collapsible, pervious container;

4. A container for infusion commodities comprising a collapsible, pervious container;

a single length of flexible material extending around the container at substantially its midportion with the free coterminous and secured to opposite sides of a tag;

ends of the respective strands being substantially coterminous and secured to opposite sides of a tag;

said strand being secured to said tag at a point near the top thereof; allowing a major portion of the tag to extend between the strands a substantial distance from the point of fastening so that tilting of said tag will separate said strands, one from the other;

a fastening device slidably securing the respective strands of the flexible material to opposite sides of the top of the pervious container;

said pervious container being provided with a notch in the lower peripheral portion at substantially the midpoint thereof, to receive the flexible material and retain it from lateral shifting;

whereby upon applying a pulling force to those portions of the flexible material between the tag and the fastening device, the flexible material surrounding the container and received in said notch will slide through the fastening device and compress the collapsible container.

References Cited by the Examiner

UNITED STATES PATENTS

2,466,281 4/1949 Shaw 99—77.1
2,878,927 3/1959 Haley 99—77.1 X
2,881,910 4/1959 Murphy 99—77.1
2,966,269 5/1961 Goldberg 99—77.1 X

References Cited by the Applicant

UNITED STATES PATENTS

1,775,347 9/1930 Hirschhorn.

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