This invention relates to a compact drinking straw, to a package containing the same and to the use of the same in connection with the inhibition of beverages from cartons, cups and similar containers.

With the increased use of automatic vending machines, many of which are unattended for long intervals of time, the consumer frequently finds that the supply of loose straws provided adjacent the vending machine has been exhausted, or has been rendered unsanitary by the disposal of waste products into the straw-carrying receptacle. Also, a person may purchase a carton of milk at one location in a cafeteria and have to go to another location for a drinking straw.

For these and other reasons it has become desirable to provide a sanitary drinking straw which will be available to the beverage consumer at all times.

Briefly the present invention comprises a collapsible or telescopic drinking straw through which persons can drink any of the beverages presently marketed in cups, cartons or similar receptacles.

The invention may be utilized in a variety of ways, some of which are shown for purposes of illustration in the accompanying drawings, in which:

FIGURE 1 is a view showing the individual elements in a three part collapsible straw, prior to their assembly, the shapes having been exaggerated somewhat for purposes of illustration;

FIGURE 2 is a view of the straw after the pieces of FIGURE 1 have been fitted together and the straw has been extended;

FIGURE 3 is a view in perspective showing the straw of FIGURES 1 and 2 in one form of a sanitary wrapper in which the straw may be packaged;

FIGURES 4, 5 and 6 are perspectives each showing one manner in which the package of FIGURE 3 may be attached to various types of beverage containers such as the cartons in which milk is commonly dispensed to the consumer.

As best seen in FIGURES 1 and 2, the collapsible straw of this invention comprises three interfitting sections. It will be understood that as few as two and as many as four or more pieces may be used, but it is preferred to use three since the cost of manufacturing increases as the number of pieces increases without any corresponding advantages.

The straw of FIGURES 1 and 2 comprises a base 10 or first section, which is approximately 2¾” long and which is constructed of plastic and may be somewhat pliable; a second section 12 which fits into base 10; and a third or top section 14 which fits into section 12. As shown in the figures, each section is tapered towards one end. When the narrower end 16 of section 14 is inserted through the wide end 18 of section 12 and the narrower end 20 of section 12 (with section 14 already inside of section 2) is inserted through the wide end 22 of section 10 the drinking straw will be only about as long as any one of the individual sections. Thereafter, after the sections have been assembled in the manner indicated a crimp 24 is made on opposite walls adjacent to the bottom of section 10 by pressing with a suitable tool, which may be heated, across the bottom of the straw. This crimp serves to prevent the smaller pieces of the straw from falling out of the bottom 22 of the straw when the several pieces have been inserted into section 10 in the manner indicated. By turning the straw upside down and shaking it, the two inner sections fall out or are readily pulled out as far as the narrow end of the section in which they are contained and the resulting straw then has the appearance of FIGURE 2 which shows the straw extended to its full length. The inner sections 12 and 14 are preferably made of paper, e.g. the waxed paper presently used in the drinking straws now on the market for the same purpose, but the bottom or outermost section 10, which forms the holder for the other sections of the straw must be constructed of a firm, but slightly pliable plastic in order to be able to withstand possible crushing before the straw is used by the consumer.

The straw may be affixed to a carton or cup by various fastening means provided that they do not cause the package to lose its sanitary character.

Once the straw has been assembled it is encased in a wrapper 30 made of cellophane, glassine, or other transparent water-proof material, adapted to form a sanitary air-tight envelope.

Any form of sanitary wrapper may be used without departing from the intended scope of the invention, for example as shown in FIGURE 5, a wrapper 30 is provided with a tear strip 32 similar to the opening strips presently used on packages of cigarettes and chewing gum and other automatically vended articles. The package of FIGURE 3 may also include a tab 34 of fiberboard which may be fastened to the wrapper in any suitable manner and which may have a message or advertisement on its face, or it may be secured to a cup or carton by a strip of cardboard or by a tape 38 as shown in FIGURE 4. Tape 38 may be integral with carton 40, in which case tab 34 is slipped under tape 38 in assembling the package. It is preferred that the straw package 30 be secured to square carton 40 on a slant, as it would then be less likely to fall out when the carton or cup is being carried. It is also possible to merely hold the packaged straw on the cup or carton or bottled drink by means of a rubber band.

In FIGURE 5, the compact drinking straw is shown in its cover 30 of cellophane, glassine or waxed paper, laid diagonally in the lid 42 of the carton 40. If the side walls of the lid are not sufficiently high to prevent the packaged straw from protruding over the package, the lid may be formed with a depression therein, as shown in the dashed lines on FIGURE 4, in order to receive the packaged telescopic straw.

In FIGURE 6 the packaged straw is shown attached to one of the sloping gables of a gable type carton, by strip 39. It is also possible to affix the packaged straw to the gable type carton by stapling or heat sealing tab 34 to the roof piece 38 of the gable type carton 44.

It will be seen that the present invention provides a drinking straw which can be easily attached to the side of a small milk carton or waxed paper cup used for soft drinks, which can be fastened to the neck of a soft drink bottle, or which can be easily carried in one’s pocket or handbag and that such a straw may be used to very good advantage where cartons of milk are sold in vending machines, snack bars or carry-out counters or on trains or buses. The straw may be attached to the container at any time and it may be preferable when the straw is used on cartons being dispensed by vending machines, that the straw be attached to the carton at the time the carton is put into the machine.

Having now described a number of preferred embodiments of my invention it is not intended that it be limited except as may be required by the appended claims.

It will be seen that the packaged straw of the present invention may be associated with the small half-pint cartons commonly used without being inserted into the contents of the carton and that the straw is maintained in a sterile and sanitary state at all times.
It is also possible to vend the straw separately in the same machines as those in which the cartons are sold, e.g., in the same manner that matches are dispensed as a separate item when cigarettes are purchased from a vending machine, although it is preferred to dispense the container and packaged straw as a unit.

I claim:

1. A packageable, telescopically collapsible straw comprising at least two separate tubes each tapered from one end to the other, the smaller of said tubes having a larger end snugly received in the smaller end of the next larger tube, the largest of said tubes being made of a relatively rigid and less crushable material than any of the smaller of said tubes, and crimp means at the largest end of said larger tube preventing any of said smaller tubes from falling out of the large tube when said straw is collapsed and said tubes are nested within one another in a crush resistant larger tube and when enclosed in a sanitary wrapper.

2. The straw of claim 1 collapsed and in a transparent sanitary wrapping.

3. The package of claim 2 including a tear strip thereon.

4. In a container for beverages, the packaged straw of claim 2 secured thereto.

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