Feb. 21, 1939. R. EPSTEIN 2,148,047

SELTZER BOTTLE ATTACHMENT

Filed Aug. 12, 1937

Fig. 1.

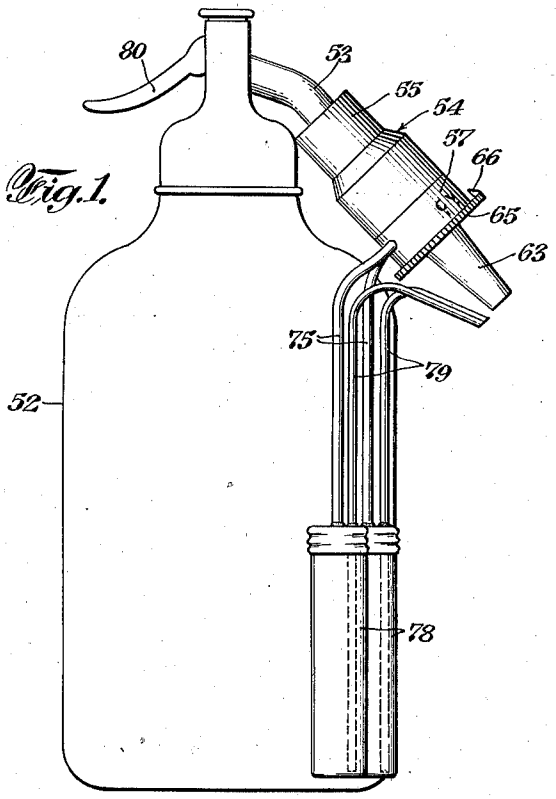


Fig. 2.

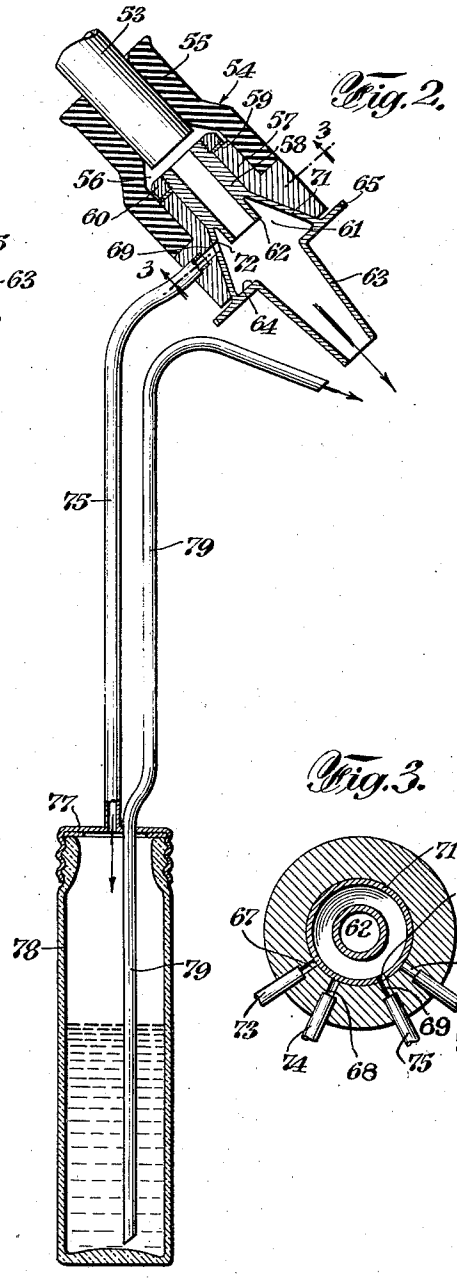
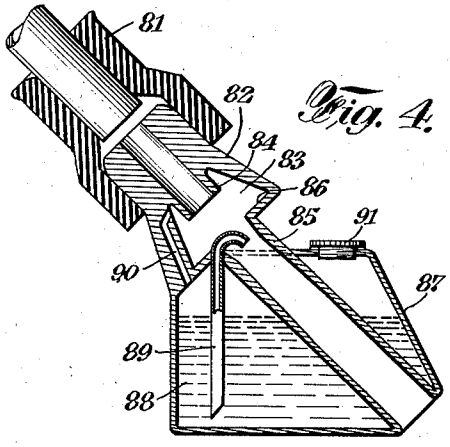


Fig. 3.

Fig. 4.



INVENTOR
Ruben Epstein
BY E R Posnack
ATTORNEY

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SELTZER BOTTLE ATTACHMENT

Ruben Epstein, Brooklyn, N. Y.

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9 Claims. (Cl. 225—22)

This invention relates to attachments for seltzer bottles or the like adapted to effect the admixture of a selected syrup with the liquid being dispensed to produce a flavored beverage.

There are various types of syphon-like devices in common use for dispensing either carbonated water or other liquids impregnated with gases to produce palatable beverages,—such devices being generally either of the usual seltzer bottle variety or of the type having a replaceable cartridge therein containing the compressed gas. Upon a manipulation of suitable mechanism in a device of this class, such as the depression of a lever, the liquid with the gas impregnated therein is ejected from a suitable spout. It is however frequently desired, particularly where carbonated water is being dispensed, to give flavor to the beverage by adding a selected fruit syrup or extract. It is hence within the contemplation of this invention to produce a flavored beverage with devices in said category by a single manipulation during the dispensing operation.

It is also an object of this invention to enable any selected one of a number of different flavors to be readily admixed with the fluid being dispensed.

And another object of my invention is to provide a simple and inexpensive device for performing the above-stated functions, and which can be readily and quickly attached to a syphon bottle or similar device containing a discharge spout thereon.

Other objects, features and advantages will appear from the drawing and the description hereinafter given.

Referring to the drawing,

Figure 1 represents an ordinary seltzer bottle with a modified form of my invention attached thereto.

Figure 2 is an enlarged section of the device of Figure 1 illustrating its detailed construction and showing the assembly of the nozzle and a syrup container.

Figure 3 is a transverse section of the attachment of Figure 2 taken along line 3—3, and

Fig. 4 is a fragmentary vertical section showing another modified form of this invention with a syrup container integral with the ejector attachment.

Referring to Figures 1, 2 and 3, the syphon-like device to which this form of my invention is attached is illustrated as being the seltzer bottle **52** containing the spout **53** and the other elements of known construction, although it is also within the contemplation of this invention to apply it to the replaceable gas cartridge type of dispenser. The syrup dispensing attachment **54** contains a fitting **55**, preferably of rubber or other yieldable material, containing an axial hole **56** the lower portion of which is of expanded proportions. Into said axial hole the said spout **53** is adapted to extend for supporting the said attachment.

Positioned within the lower expanded portion of said hole **56**, and suitably attached to the fitting **55**, is the bushing **57** containing, in the preferred form thereof, an axial hole the lower portion of which is of conical configuration. An adjustable ejector attachment **58** is rotatably positioned within the axial hole of the bushing **57**, the upper portion of said attachment having attached thereto the spring washer **59** and the lock nut **60** in engagement with the upper end of the bushing, thereby serving to rotatably retain the attachment **58** in position and serving the additional purpose of preventing the escape of any released gases between the contacting surfaces of said attachment and the bushing. Said attachment **58** contains an expanded and preferably conical chamber **61** into which the jet **62** extends, the discharge outlet of the device comprising the nozzle **63** communicating with said chamber. It will be noted that the base of the chamber contains the annular wall or deflecting surface **64** having a central opening therein joining the passageway within the nozzle. The attachment also contains the flanged portion **65** underlying the bottom of the bushing **57** and extending outwardly therebeyond. As indicated in the drawing, the peripheral edge of said flanged portion is serrated, and contains at one portion thereof a pointer **66** adjacent the markings or indicia on the outer surface of the bushing to indicate flavors, such as the letters C and V, for chocolate and vanilla, as shown in Figure 1.

In the form illustrated there are four holes **67**, **68**, **69** and **70** extending through the lateral wall of the bushing into the axial hole thereof,—the conical wall **71** of the attachment containing therein a single aperture **72** adapted for successive registry with said holes **67**, **68**, **69** and **70** upon a rotatable manipulation of the attachment **58**, as will be more specifically hereinafter described.

Extending into said holes **67**, **68**, **69** and **70** and preferably molded into the body of the bushing **57** are the preferably rigid tubes **73**, **74**, **75** and **76**. Said tubes extend downwardly as illustrated in the drawing, each one having attached

to the terminal portion thereof a cap 77 which serves as a closure for the syrup containers 78. Each one of said containers has therein an outlet tube 79 which extends from the bottom of the container upwardly through the cap and into a region adjacent the nozzle 63.

Upon depressing the lever 80, the liquid is ejected through the spout 53 and consequently through the jet 62 and the nozzle 63 to be received by a suitable receptacle. Inasmuch as the outlet opening of the jet 62 is no greater than the nozzle 63, the liquid under the influence of the pressure induced by the syphon will be ejected in a continuous stream out of the nozzle 63. However, in view of the fact that the chamber 61 is of expanding proportions, some of the impregnated gases within the liquid being dispensed will be released, and will enter (see Figure 2) the aperture 72 in the ejector attachment and out through the opening in the bushing 57 in registry therewith, the drawing showing said aperture 72 in registry with the opening 69. The deflecting surface 64 will serve to enhance the effectiveness of this action by causing any of the released gases that may be directed thereagainst to be deflected rearwardly, thereby causing a back pressure and ultimately resulting in the forcing of said released gases into the corresponding tube extending to the syrup container 78, the drawing showing the gases flowing down the tube 75. This action will obviously cause a pressure within said container 78, to force the fluid contents thereof up through the outlet tube 79, to be ejected therefrom and ultimately admixed with the fluid being discharged through the nozzle 63.

Upon a rotation of the ejector attachment 58 by manipulation of the flange 65, the aperture 72 in the wall 71 can be brought into registry with any of the openings 67, 68, 69 and 70 so as to effect an operative communication between the ejector attachment and the selected syrup container 78. It is of course understood that the flavor markings, such as C and V, are so spaced in accordance with a prearranged design as to operatively correspond with the spacing of the holes 67, 68, 69 and 70, so as to enable the desired syrup to be properly dispensed in the manner hereinabove described.

Any number of syrup containers can obviously be employed within the limitations imposed by the size of the seltzer bottle. Inasmuch as each of the tubes 73, 74, 75 and 76 are of rigid construction, they can be arranged to adequately support the syrup containers suspended therefrom.

In the modified form of my invention as illustrated in Figure 4, the fitting 81 is preferably similar in general configuration to the fitting 55 shown in Figure 2. The casing 82 is suitably affixed to the fitting 81 and contains therein an enlarged chamber 83 into which extends the jet 84. The discharge nozzle 85 extends outwardly from the base 86 of the chamber,—there being a shell 87 substantially surrounding the nozzle and forming a syrup compartment 88. Extending upwardly from the bottom of the compartment into the nozzle 85 is the discharge tube 89. Communicating between the chamber 83 and the compartment 88 is the passageway 90 contained within the body of the casing 82.

In the operation of this device, the fluid being dispensed is forced from the spout through the jet 84 and through the nozzle 85 to be received by a suitable receptacle. Due to the expanded proportions of chamber 83 some of the gases impregnated within the liquid being dispensed will be released and forced through the passageway 90 into the compartment 88, the base 86 serving as a deflecting surface to create a back pressure to enhance this effect. The increased pressure within compartment 88 will cause the syrup contained therein to be forced outwardly through the tube 89 into the nozzle 85 to be admixed with the discharged fluid. The cap 91 is suitably attached to the shell 87 to form a closure therefor.

The last mentioned modification is hence adapted to contain in one unitary structure both the syrup and the discharge nozzle, the compartment 88 being adapted to comprise either a single compartment, or a number of different cells for different syrups. By simply attaching this form of my invention to a nozzle, a flavored beverage can be readily obtained.

It is of course understood that the various embodiments above described and shown in the drawing are illustrative of my invention and not employed by way of limitation, inasmuch as numerous changes and modifications may be made within the scope of the appended claims without departing from the spirit of this invention.

What I claim is:

1. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a rotatable discharge nozzle in communication with the spout, a plurality of syrup containers, fluid conducting means extending from each of said containers to said nozzle, an opening in the wall of the nozzle adapted to be successively positioned in communication with said fluid conducting means upon a rotary manipulation of the nozzle, and an outlet tube operatively extending from each of said containers to a point adjacent the discharge terminal of the nozzle.

2. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a rotatable discharge nozzle in communication with the spout, said nozzle containing an intermediate chamber of expanded proportions and a jet extending into said chamber, a plurality of syrup containers, fluid conducting means extending from each of said containers to said nozzle, an opening in the wall of the nozzle adjacent said jet and adapted to be successively positioned in communication with said fluid conducting means upon a rotary manipulation of the nozzle, and an outlet tube operatively extending from each of said containers.

3. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a rotatable discharge nozzle in communication with the spout, said nozzle containing an intermediate chamber of expanded proportions and a deflecting wall at the base of the chamber, a plurality of syrup containers, fluid conducting means extending from each of said containers to said nozzle, an opening in the wall of the nozzle above said wall and adapted to be successively positioned in communication with said fluid conducting means upon a rotary manipulation of the nozzle, and an outlet tube operatively extending from each of said containers.

4. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a bushing attached to the fitting, a discharge nozzle in com-

munication with the spout and rotatably secured within the bushing, said nozzle containing an intermediate chamber of conical configuration and a jet extending into the chamber, the chamber containing at the base thereof a deflecting wall, said bushing containing a plurality of apertures therein; a plurality of syrup containers, fluid conducting means extending from each of said containers to said apertures, an opening in the wall of the nozzle adapted for successive registry with said apertures upon a rotary manipulation of the nozzle, means on the nozzle for rotatably manipulating it, and an outlet tube operatively extending from each of said containers.

5. In an attachment for a syphon dispenser containing a spout thereon, a hollow fitting adapted for attachment to said spout, a discharge nozzle associated with said fitting and adapted to be in communication with the spout, said nozzle containing an intermediate chamber of expanded proportions and a jet extending into said chamber, a syrup container adjacent said nozzle and integral therewith, a pipe communicating between said container and the interior of said nozzle, and a passageway communicating between said chamber and said container.

6. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a discharge nozzle in communication with the spout, syrup container means, fluid conducting means extending from said container means to the interior of said nozzle, and an outlet tube operatively extending from said container means to a point adjacent the discharge terminal of the nozzle.

7. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a discharge nozzle in communication with the spout, said nozzle containing an intermediate chamber of expanded proportions and a jet extending into said chamber, syrup container means, fluid conducting means extending from said container means to the interior of said nozzle, and an outlet tube operatively extending from said container means.

8. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a discharge nozzle in communication with the spout, said nozzle containing an intermediate chamber of expanded proportions and a deflecting wall at the base of the chamber, syrup container means, fluid conducting means extending from said container means to the interior of said nozzle and an outlet tube operatively extending out from said container means.

9. In combination with a syphon dispenser containing a spout, an attachment containing a hollow fitting attached to the spout, a discharge nozzle in communication with the spout, said nozzle containing an intermediate chamber of conical configuration and a jet extending into the chamber, the chamber containing at the base thereof a deflecting wall, syrup container means, fluid conducting means extending from said container means into the nozzle, and an outlet tube operatively extending out from said container means.

RUBEN EPSTEIN.