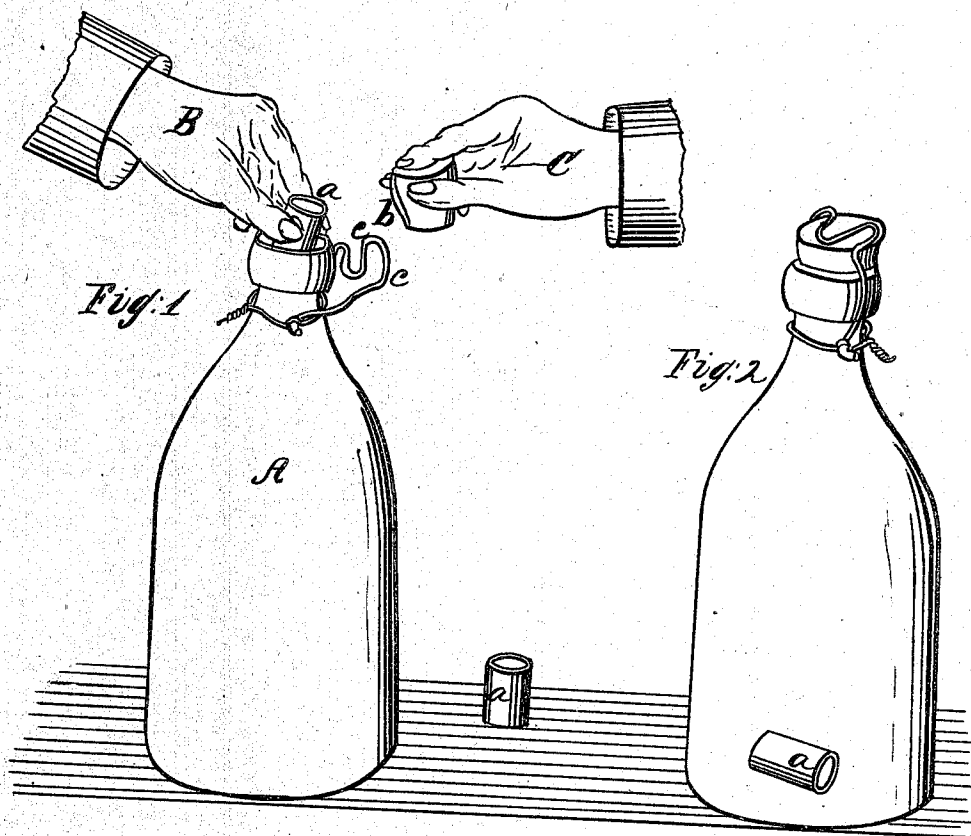


T. Maloney.

Bottling Mineral Water.

N^o 112,610.

Patented Mar. 14, 1871.



Witnesses
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THOMAS MALONEY, OF DES MOINES, IOWA.

Letters Patent No. 112,610, dated March 14, 1871.

IMPROVEMENT IN THE MANUFACTURE OF BOTTLED MINERAL WATER.

The Schedule referred to in these Letters Patent and making part of the same.

I, THOMAS MALONEY, of Des Moines, in the county of Polk and State of Iowa, have invented a new Device and Process for Bottling Mineral Water, of which the following is a specification.

My invention is designed to provide a simple means for filling bottles with mineral water in such a manner that bottles may be filled and refilled at any time and place, and as often as desired.

It consists in a device shaped similarly to a thimble, by which one of the component parts of mineral water is graduated and introduced into the liquid in the bottle with one hand of the operator, while his other hand is free to cork the bottle instantly and before effervescence takes place.

The drawing represents my device and illustrates the process of using it.

Figure 1 is a half-pint bottle, filled with water containing sugar, flavoring, and tartaric acid, in the proportions commonly used.

The left hand, over the bottle, is introducing my glass thimble filled with subcarbonate of soda or its equivalent.

The right hand is holding a cork.

A is the bottle.

B, the left hand.

a a represent my glass thimbles.

One is between the thumb and finger of the hand B, and the other on the outside of the bottle.

These thimbles are made of glass, or its equivalent. They may be made of sugar, or its equivalent, so that they will dissolve in the bottle.

Subcarbonate of soda, or its equivalent, may be combined with a soluble solid and introduced into the bottle in the same manner as my glass thimble is dropped in. But a glass thimble is preferable, and can be used perpetually.

They are made hollow, and with a flat bottom for a base to stand upon, and small enough to pass easily through the mouth and neck of the bottle.

They vary in size to suit various sizes and forms of bottles. They must be an exact measure for graduating the subcarbonate of soda, tartaric acid, or whatever substance is last introduced to cause effervescence.

C is the right hand, holding the cork b.

c c is a bent wire, such as are in common use for holding a cork in a bottle.

Figure 2 is a half-pint bottle filled and corked ready for sale and use.

The glass thimble a is seen inside, on the bottom.

When the bottle is emptied the glass thimble may be poured, with the mineral water, into the glass or vessel from which the liquid is drank; but it will remain harmless in the bottom of the glass, and can then be returned to the empty bottle or some other convenient place, until used again to charge the bottle with a gaseous fluid.

Soda-water and all the common effervescent mineral waters may be easily bottled by the simple means I have described, without the aid of any machinery.

The chemical ingredients, and the empty bottles and glass thimbles can be furnished, with instructions, so that any person may, at any time and place, fill and refill the bottles with mineral water of the various kinds, as often as desired.

The cost of machinery for bottling and the freight on the water will be saved by the use of my means.

The convenience of refilling the bottles at any time and place is a great advantage that will be fully appreciated by dealers, who often fail to get the filled bottles from distant bottling establishments in time to meet the demands of the consumers.

In filling a half-pint bottle I use clear, pure water, from one-half ($\frac{1}{2}$) to three-fourths ($\frac{3}{4}$) of an ounce of sugar, and flavoring as desired, and thirty (30) grains of tartaric acid, and thirty (30) grains of subcarbonate of soda.

Either one of the latter-named ingredients may be introduced with the glass thimble in the manner described, and with the same effect.

The proportions here given may be varied, as desired.

Claims.

I claim as my invention—

1. The glass thimble, or its equivalent, substantially as described, and for the purposes specified.
2. The process of preparing effervescent mineral waters in bottles by introducing one of the component parts by means of a graduated measure or thimble, in the manner described.

Witnesses:

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