

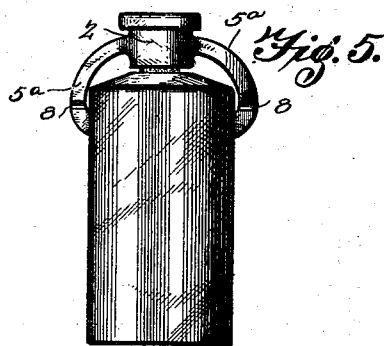
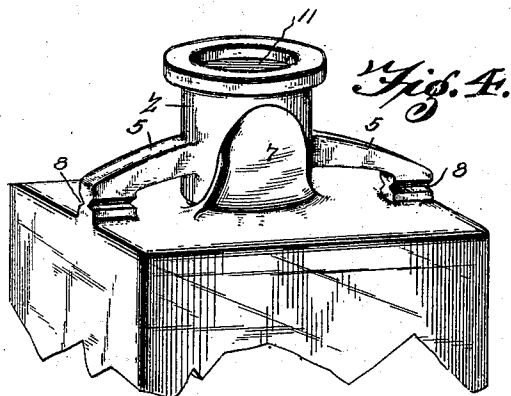
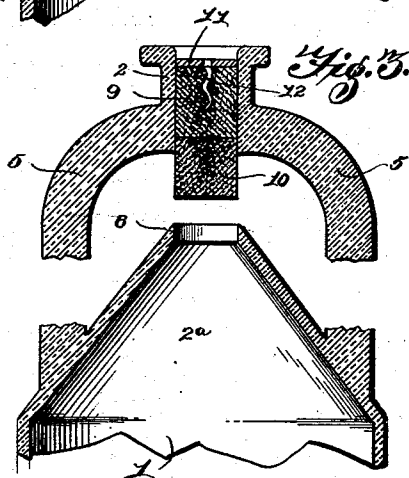
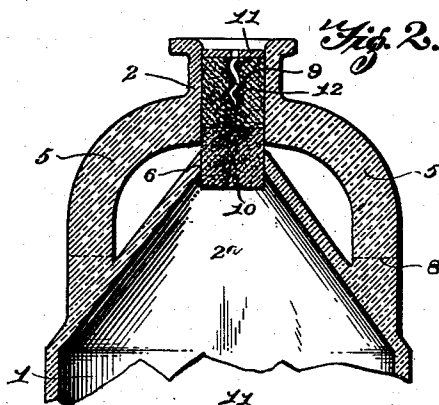
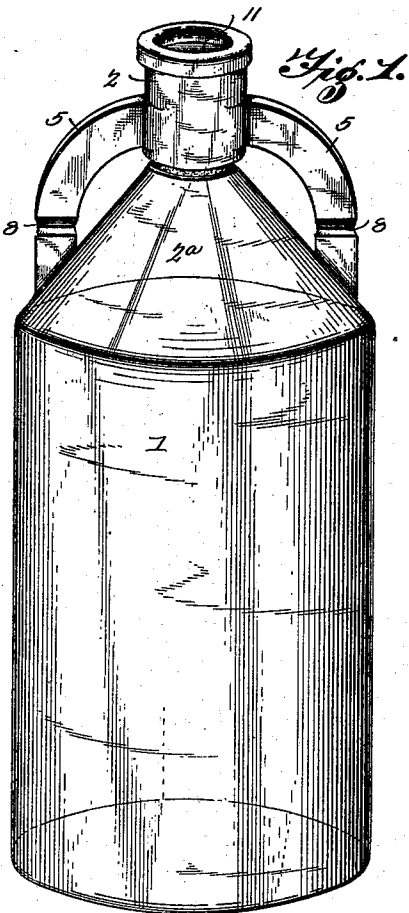
No. 664,605.

H. J. BLOOMER.
NON-REFILLABLE BOTTLE.

Patented Dec. 25, 1900.

(Application filed Apr. 10, 1900.)

(No Model.)



Witnesses

I. S. Donders

J. F. Riley

By *his* Attorneys,

Howard J. Bloomer inventor

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

HOWARD J. BLOOMER, OF NORWALK, CONNECTICUT.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 664,605, dated December 25, 1900.

Application filed April 10, 1900. Serial No. 12,329. (No model.)

To all whom it may concern:

Be it known that I, HOWARD J. BLOOMER, a citizen of the United States, residing at Norwalk, in the county of Fairfield and State of Connecticut, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

The invention relates to improvements in non-refillable bottles.

One object of the present invention is to improve the construction of non-refillable bottles and analogous receptacles and to provide a simple, inexpensive, and efficient one, which in order to obtain access to its contents will have to be sufficiently mutilated to prevent it from being again used as an original package.

A further object of the invention is to prevent any fragments of glass from entering the receptacle when the device is broken or mutilated.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a non-refillable bottle constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a similar view, the bottle being broken. Fig. 4 is a perspective view of a portion of a bottle having a flat top and provided with a lip or spout. Fig. 5 is an elevation of a bottle, showing the frangible arms connected with the side faces of the body of the bottle.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a bottle having a tapering upper portion 2^a and provided with a superimposed neck 2, which has its lower end located above and spaced from the body of the bottle and supported by a pair of laterally-extending frangible arms 5. The body of the bottle or other receptacle is provided directly below the lower end of the neck with an aperture 6 of the same diameter as the interior of the neck; but it may be a trifle smaller than the same to compress a lower cork or stopper. The laterally-extending frangible arms 5, which support the neck above the body of the receptacle, may be connected with the latter

at any desired point sufficiently remote from the aperture to prevent any fragments of glass from entering the receptacle when the arms are broken. The outer ends of the arms 5 are provided at opposite sides with recesses 8, forming frangible ligaments which are adapted to be readily broken; but the weakened portions of the frangible arms may be of sufficient strength to prevent them from being accidentally broken by the jars and vibration incident to shipment. The outer ends of the arms 5 are located at opposite sides of the tapered portion 2^a of the body of the bottle, and the frangible ligaments are arranged below the plane of the aperture; but, if desired, the arms may be arranged at the top of the bottle, as indicated in Fig. 4, or at opposite sides of the body, as shown in Fig. 5. The arms may be applied to bottles and other receptacles of all shapes and sizes, and they will be arranged at the most convenient point for carrying out the object of the invention, and when they are broken the superimposed neck is detached, and the appearance of the receptacle is such that it will be effectually prevented from being resold as an original package. The neck receives an upper stopper or cork 9, and the aperture 6 is closed by a lower cork or stopper 10, which extends into the lower portion of the neck 2, whereby it may be conveniently extracted from the aperture by using the neck as a handle after the arms have been broken. After the lower stopper has been extracted by the removal of the neck it may be readily detached therefrom and replaced in the aperture.

When the upper portion of the body is tapered, as illustrated in Figs. 1 to 3 of the drawings, the liquid may be easily decanted; but when the bottle is provided with a flat top, as shown in Fig. 4, a lip or spout 7 is preferably arranged adjacent to the aperture; but it is located a sufficient distance from the same to provide a space for the superimposed neck. The lip or spout is arranged on the exterior of the neck; but it may be omitted entirely.

In Fig. 5 of the accompanying drawings a small bottle 1^a is illustrated, and the frangible arms 5^a extend from the neck to the side of the body and are connected with the same at a point below the top.

The upper cork or stopper is provided with

a guard or shield 11, consisting of a disk of metal provided with a centrally-arranged corkscrew 12 or other suitable fastening device, which is embedded in the upper cork or stopper before the same is introduced into the neck of the bottle, and when the parts are assembled the corkscrew firmly holds the shield or guard on the upper face of the cork or stopper 9 and prevents the same from being extracted by a corkscrew or similar device, so that the arms will have to be broken in order to obtain access to the contents of the receptacle. When the stoppers or corks are in position, as illustrated in Figs. 1 and 2, the guard or shield is located a short distance below the upper edges of the neck to provide a space for the reception of a suitable sealing material, such as sealing-wax. The upper stopper may be constructed of glass and may be secured within the superimposed neck. When this construction is employed, the guard or shield will be unnecessary, as the glass stopper cannot be extracted by a corkscrew or similar instrument. Also the bottle or other receptacle may be sealed around the base of the superimposed neck, which will render it air-tight. Instead of making the arms 5 and 5^a curved they may be made straight, or arms of an ornamental character may be provided.

It will be seen that the receptacle is simple and comparatively inexpensive in construction, that the superimposed neck is spaced from the body of the receptacle and is supported by frangible arms, and that the latter are connected with the body of the receptacle at points sufficiently remote from the aperture to prevent any fragments of glass from entering the bottle when the neck is broken off. Furthermore, it will be seen that the non-refillable receptacle is mutilated sufficiently in opening it to effectually prevent it from being refilled and resold as an original package and that it is impossible to obtain access to the contents of the receptacle for adulteration or other purposes without destroying its original appearance and indicating such fact. Also it will be clear that the superimposed neck and the frangible arms form a handle for extracting the lower cork or stopper and obviate the necessity of employing the corkscrew for this purpose.

Changes in the form, proportion, size, and the minor details of construction within the

scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. A device of the class described comprising a receptacle provided with an aperture and having a superimposed neck located above the aperture and spaced entirely therefrom, a frangible connection supporting the neck and adapted to be broken at a point remote from the aperture whereby the edges of the bottle at the aperture are left smooth and unbroken, and a stopper arranged in the aperture and extending into the neck, said neck forming a handle for removing the stopper when the frangible connection is broken, substantially as described.

2. A device of the class described comprising a receptacle provided with an aperture, and a neck spaced entirely from the said aperture and connected with the receptacle by a frangible portion located at a point remote from the said aperture whereby the edges of the bottle at the aperture are left smooth and unbroken, substantially as described.

3. A device of the class described comprising a receptacle provided at its top with an aperture, a superimposed neck located above and spaced entirely from the aperture, frangible connections supporting the neck and united with the receptacle at points remote from the aperture whereby the edges of the bottle at the latter are left smooth and unbroken, and corks or stoppers arranged within the neck and the aperture, substantially as described.

4. A device of the class described comprising a receptacle provided with an aperture, a superimposed neck spaced entirely from the receptacle to leave the edges of the bottle at the apertures smooth and unbroken, the arms supporting the neck and connecting the same with the receptacle and provided with recesses forming weakened portions, and upper and lower stoppers arranged within the neck and the aperture, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HOWARD J. BLOOMER.

Witnesses:

J. B. ELLS, Jr.,
L. MONTGOMERY.