

UNITED STATES PATENT OFFICE.

VICTOR BARTCAVITZ, OF CHICAGO, ILLINOIS.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 710,314, dated September 30, 1902.

Application filed March 12, 1902. Serial No. 97,942. (No model.)

To all whom it may concern:

Be it known that I, VICTOR BARTCAVITZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Bottle, of which the following is a specification.

The invention relates to improvements in bottles.

The object of the present invention is to provide a simple, inexpensive, and efficient bottle designed especially for use in handling proprietary liquids and adapted after it has received its original contents to be readily corked and capable of effectually preventing access to its contents without arranging the parts so that they will readily indicate such fact, whereby adulterations of the original contents of receptacles and fraudulent refilling of the same will be effectually prevented without mutilating the receptacle and without liability of getting particles of broken glass into the same.

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 side elevation of a bottle constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same, the lower stopper being in its initial position. Fig. 3 is a horizontal sectional view, the lower stopper being forced downward into the lower portion of the neck to permit the contents of the bottle to be decanted. Fig. 4 is a horizontal sectional view on the line 4-4 of Fig. 3.

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

1 designates a neck of a bottle composed of upper and lower portions, the upper portion 2 being substantially cylindrical and slightly tapered, as illustrated in Figs. 2 and 3, and adapted to receive a lower indicating-stopper 3 and an upper cork 4; but the latter may be dispensed with, if desired, as the lower indicating-cork will effectually close the neck of the bottle and prevent the escape of liquids and gases. The lower portion of the neck of the bottle is enlarged and forms an intermediate tapered portion or chamber 5, and it is

provided below the chamber with inwardly-extending longitudinal ribs 6, formed by indenting or grooving the exterior of the lower portion of the neck and providing a stopper-receiving device or support and forming intervening channels or passages 7 to permit the liquid contents of the receptacle to be readily decanted when the indicating-stopper 3 is forced downward to the position illustrated in Fig. 3 of the drawings. The longitudinal ribs, which have inclined upper edges or faces, are located at diametrically opposite points, and the space between the diametrically-arranged ribs is approximately the same as the diameter of the upper portion of the neck of the bottle, and when the upper cork or stopper is removed the lower indicating cork or stopper is adapted to be forced downward from the position illustrated in Fig. 2 to that shown in Fig. 3. The ribs are hollow and are indented at their lower ends to provide inwardly-projecting stops 8, arranged to form a seat for the stopper and adapted to limit the downward movement thereof. When the bottle is opened, the indicating-stopper is located within the lower portion of the neck and is visible through the same, so that its position may be readily ascertained. When the stopper is in this position, the liquid contained within the bottle may be readily poured off, as the passages or channels 7 will permit the liquid to pass freely through the lower portion of the neck.

In order to prevent the lower stopper from being withdrawn instead of being forced inward to the position shown in Fig. 3, the said stopper is composed of a body portion 9, of cork or other suitable material, a head 10, of glass, porcelain, or analogous material, and an elastic disk or washer 11, constructed of rubber and adapted to be compressed within the neck of the bottle at a point above the cork body portion 9, whereby it will assist in sealing the bottle when the parts are arranged as shown in Fig. 2 and will prevent the withdrawal of the stopper when the latter is forced into the lower portion of the neck. The head 10, which is provided with a stem 12, is constructed of glass or analogous material, for the purpose of rendering it frangible and also to prevent it from affecting the contents of the bottle or being affected by the same.

The stem, which extends centrally through the cork body portion 9, is provided at its lower end with an enlargement 13, and it has a disk 14 at its upper portion. The enlargement 13 forms a lower head and presents a flat upper face to the lower end of the cork body portion. The disk or flange 14 fits against the upper end of the cork body portion and is connected with the head by a reduced neck 15, which receives the elastic compressible and expansible disk. The head 10, at the upper end of the stem, forms a guard or shield to prevent the indicating-stopper from being removed by a corkscrew or other tool, and the body portion 9 and the elastic disk 11 are compressed sufficiently in the neck to prevent the stopper from being withdrawn should the upper head of the stem be gripped in any manner, and any attempt at such removal will result in breaking off the head. When the indicating-stopper is forced into the lower portion of the neck, the disk 11 expands and will prevent the withdrawal of the stopper should the latter be only partially forced downward into the space formed by the ribs. When the elastic disk 11 expands within the intermediate chamber 5, it is of greater diameter than the lower end of the upper portion of the neck, and it will thereby effectually prevent the stopper from being drawn upward or outward into the upper portion of the neck.

It will be seen that the bottle is exceedingly simple and inexpensive in construction and that it will indicate when it has been opened, and thereby prevent fraudulent refilling or adulteration. It will also be apparent that this result is effected without mutilating the bottle and that the bottle when opened will not present any sharp portions or broken edges liable to cut or otherwise injure a person handling the bottle.

What I claim is—

1. A device of the class described, comprising a neck having an upper stopper-receiving portion and provided with a lower stopper-receiving portion provided with passages, and a stopper arranged within the upper stopper-receiving portion of the neck and adapted to be forced inward into the lower portion of the neck, said stopper being provided with means for preventing its return into the up-

per portion of the neck, substantially as and for the purpose described.

2. A device of the class described, comprising a neck having an upper stopper-receiving portion and provided at its lower portion with a series of longitudinal ribs, a stopper located within the upper portion of the neck and adapted to be forced inward into the lower portion, and means for preventing the return of the stopper into the upper portion of the neck, substantially as and for the purpose described.

3. A device of the class described, comprising a neck having an upper stopper-receiving portion and provided at its lower portion with a series of ribs forming a stopper-receiving portion and providing grooves or passages, said ribs being spaced from the upper stopper-receiving portion and the neck being provided between the ribs and the upper portion with an enlarged portion forming an intermediate chamber, a stopper arranged within the upper portion of the neck and adapted to be forced inward into the lower portion, and an expansible device carried by the stopper and arranged to engage the intermediate chamber for locking the stopper to prevent the return of the same into the upper portion of the neck, substantially as and for the purpose described.

4. A device of the class described, comprising a neck having an upper stopper-receiving portion and provided with a lower portion having a longitudinal passage, said neck being also provided with an intermediate chamber of greater diameter than the upper stopper-receiving portion, a stopper arranged within the upper portion of the neck and adapted to be forced into the lower portion of the same and an expansible device carried by the stopper and arranged to engage the intermediate chamber to prevent the return of the stopper into the upper portion of the neck, substantially as and for the purpose described.

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

VICTOR BARTCAVITZ.

Witnesses:

EMIL OLSZTYRISKI,
LAWRENCE GALENZEWSKI.