Oct. 27, 1942. G. LUBIC 2,300,053

BOTTLE STOPPER

Filed May 20, 1942

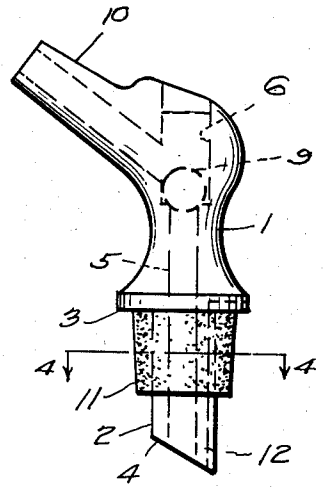



Fig. 1.

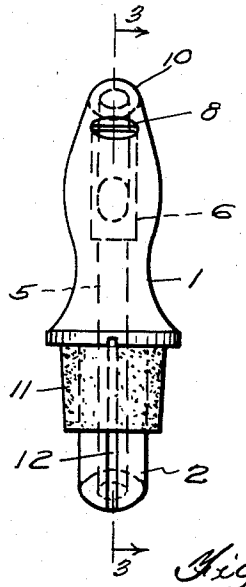



Fig. 2.

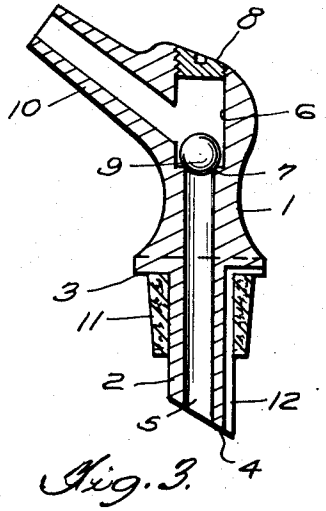



Fig. 3.

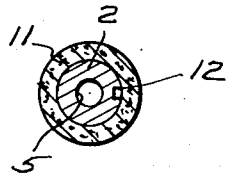



Fig. 4.

Inventor

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# UNITED STATES PATENT OFFICE

2,300,053

## BOTTLE STOPPER

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Application May 20, 1942, Serial No. 443,808

1 Claim. (Cl. 215—75)

The present invention relates to new and useful improvements in bottle stoppers, and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character comprising unique pouring or dispensing means.

Another very important object of the invention is to provide a bottle stopper of the aforementioned character comprising a gravity actuated valve of a novel construction and arrangement for automatically closing and sealing the bottle when it is righted or returned to a vertical position.

Still another very important object of the invention is to provide a bottle stopper of the character described which may be conveniently cleaned when desired whereby the device may be maintained in a highly sanitary condition at all times.

Other objects of the invention are to provide a bottle stopper of the character set forth which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, attractive in appearance, and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in side elevation of a bottle stopper constructed in accordance with the present invention.

Figure 2 is a view in rear elevation of the device.

Figure 3 is a vertical sectional view, taken substantially on the line 3—3 of Figure 2.

Figure 4 is a view in horizontal section, taken substantially on the line 4—4 of Figure 1.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a body 1 of suitable material, said body being of substantially the shape shown to advantage in Figures 1 and 2 of the drawing. The body 1 includes a reduced lower portion 2, thus providing a shoulder 3, said reduced portion comprising a beveled lower end 4.

Extending vertically through the body 1 is a passage 5 comprising an enlarged upper portion providing a chamber 6. Thus, a seat 7 is provided at the point where the passage 5 communicates with the chamber 6. A removable plug 8 is threadedly mounted in the upper portion of the chamber 6. A ball valve 9 is operable in the chamber 6 and engageable by gravity on the seat 7 for closing and sealing the passage 5 when the bottle in which the stopper is mounted is in an upright position. A pouring spout 10, which projects from the body 1, communicates with the chamber 6 at an intermediate point.

The reduction 2 is engageable in the bottle. A tapered cork collar 11 is mounted on the reduction 2 and abuts the shoulder 3. A vent channel or groove 12 is provided in the reduction 2 and the shoulder 3.

It is thought that the operation of the device will be readily apparent from a consideration of the foregoing. Briefly, the ball valve 9 normally rests by gravity on the seat 7 for closing and sealing the passage 5. However, when the bottle is tipped, the ball valve 9 rolls off the seat 7 toward the plug 8 in the chamber 6 and the fluid in the bottle flows through the passage 5, said chamber 6, and the spout 10. Of course, when the bottle is righted, the valve 9 returns to its position on the seat 7. By simply removing the plug 8, access may readily be had to the interior of the device for cleaning same when desired. This also permits the seat 7 to be renewed if necessary.

It is believed that the many advantages of a bottle stopper constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

A bottle stopper of the character described comprising a body including a reduced lower portion engageable in a bottle, said reduced lower portion providing a shoulder on the body, a tapered cork collar on the reduced portion and abutting the shoulder, said reduced portion and said shoulder having a vent channel therein, said body having a vertical passage therethrough including an enlarged upper portion constituting a chamber and providing a seat in the body, a removable closure plug threadedly mounted in the upper portion of the chamber, a pouring spout integral with the body and communicating with the chamber at an intermediate point, and a ball valve operable in the chamber and engageable by gravity with the seat for closing and sealing the passage when the bottle is in an upright position.

GEORGE LUBIC.