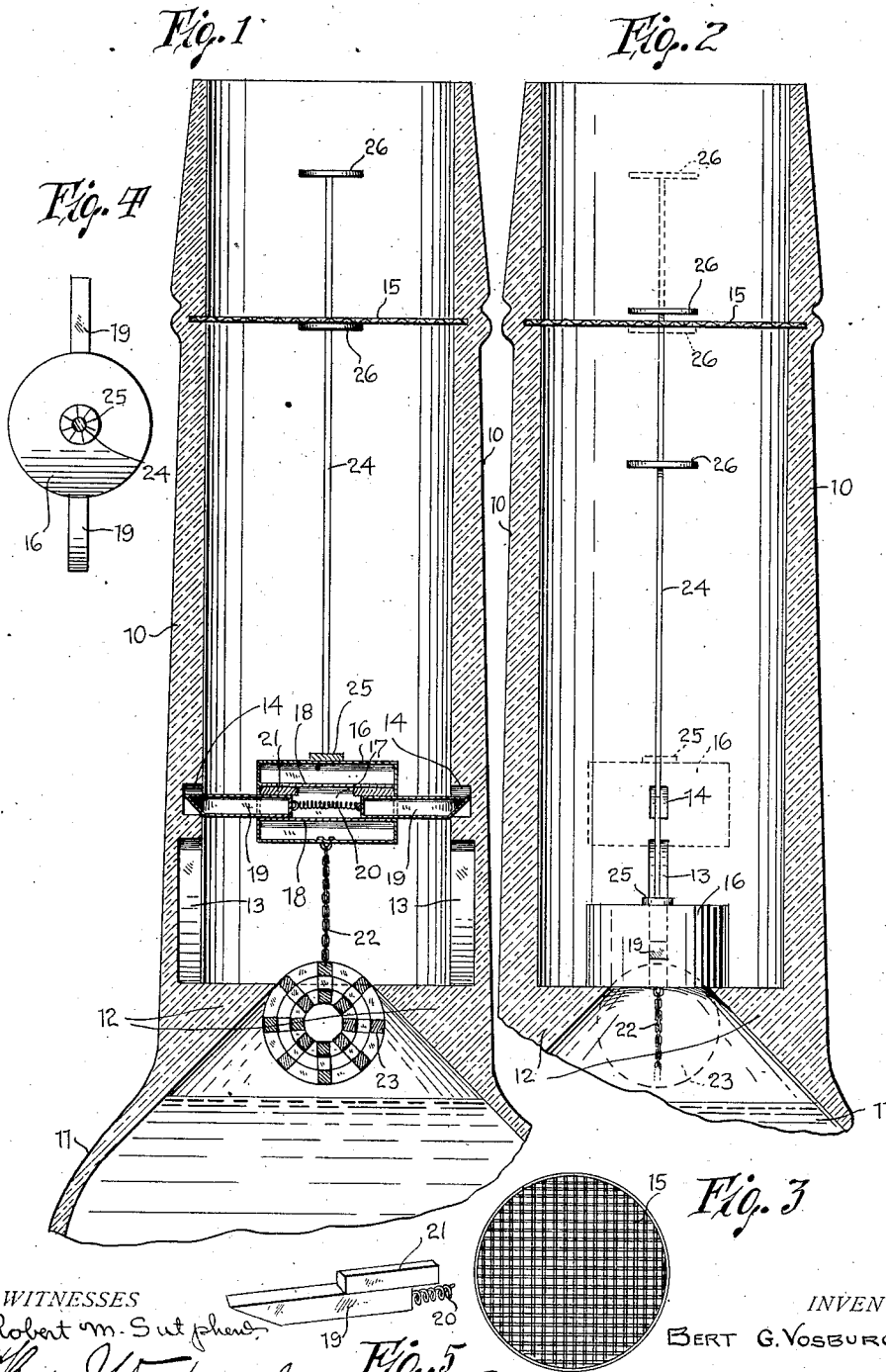


B. G. VOSBURGH.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAY 1, 1912.

1,048,010.

Patented Dec. 24, 1912.



WITNESSES
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UNITED STATES PATENT OFFICE.

BERT G. VOSBURGH, OF WARSAW, NEW YORK.

NON-REFILLABLE BOTTLE.

1,048,010.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BERT G. VOSBURGH, a citizen of the United States, residing at Warsaw, in the county of Wyoming and State of New York, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to non-refillable bottles, and the principal object of the same is to provide a bottle in which there is provided a special type of valve which is held in a raised position, while initially filling the bottle, and which is automatically moved to an operative position upon the cork being placed in the neck of the bottle. After the cork has been placed in the bottle and removed the contents of the bottle may be poured out but the bottle cannot be refilled, since the valve is so mounted that it will prevent this.

With these and other objects in view, this invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

This invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a sectional view showing the valve in position before the cork is inserted. Fig. 2 is a view showing the position of the valve after the cork has been inserted and withdrawn again, the view being taken at right angles to that shown in Fig. 1. Fig. 3 is a view of the screen mounted in the outer end portion of the bottle. Fig. 4 is a plan view of the valve. Fig. 5 is a perspective view of one of the latches carried by the valve.

Referring to the accompanying drawings, it will be seen that the neck 10 of the bottle 11 is provided with a thickened inner end portion forming a valve seat 12, the inner face of which is conical as shown in Figs. 1 and 2. Grooves 13 are formed in the inner portion of the neck above the valve seat 12, and sockets 14 are formed above the grooves 13. A screen 15 is embedded in the neck of the bottle near the outer end and is formed of fine wire mesh which will permit the contents of the bottle to be poured out but which will prevent a wire or some article to be passed through the neck to engage the valve and hold it out of the way so that the bottle may be refilled.

A disk valve is mounted in the neck 10 and comprises the body portion 16 which is provided with the passageway 17. This passageway is formed by mounting plates 18 in the body portion above and below openings formed in the side, and forms a housing in which the inner end portions of the latches 19 are mounted. These latches are formed as shown in Fig. 5 and are provided with beveled ends which fit into the sockets 14 and are normally held in the sockets by the spring 20 which is placed between the inner ends of the two latches. Abutment blocks 21 are mounted upon the latches and limit the outward movement of the latches so that there will be no danger of the latches slipping out of the body portion. A chain 22 is connected with the valve and carries a perforated weight 23 which is positioned within the bottle beneath the valve seat 12.

A plunger 24 passes through the wire mesh and has its inner end formed into a head 25 which rests upon the valve. Stop plates 26 are carried by the outer portion of the plunger one above and one below the screen so that the inward and outward movement of the plunger is limited. When initially filling the bottle, the valve is in the position shown in Fig. 1 with the latches positioned in the sockets 14, thus holding the valve above the valve seat and permitting the liquid to be poured through the neck and through the perforated weight into the bottle. After the bottle has been filled, the cork is placed into the bottle and forced in tight upon the screen 15. This forces the plunger into the bottle as shown in Fig. 2 so that the valve is thrown inwardly thus causing the latches to ride out of the sockets and into the grooves 13. The upper edges of the latches are not beveled, and therefore the valve cannot return to its original position, and the weight holds it upon the valve seat thus closing the opening formed in the neck when the bottle is in the position shown in Fig. 2 and preventing it being refilled. After the cork is withdrawn, the bottle is turned and the liquid poured out. When the bottle is turned the weight rolls toward the valve seat, thus slacking the chain and allowing the valve to drop from the valve seat and permitting the liquid to flow out. It should be noted that the sloping face of the valve seat makes it necessary to tip the bottle for a considerable amount

before the weight will roll toward the valve seat, thus preventing the bottle from being turned on its side and being immersed in a deep receptacle which is filled with the liquid.

What is claimed is:—

1. A bottle, a neck leading from said bottle, a valve seat at the inner end of said neck, said neck being provided with grooves leading from said valve seat and with sockets above said grooves, a screen embedded in said neck adjacent its outer end, a valve comprising a body portion having a passageway formed therethrough, said passageway being provided with reduced end portions, latches mounted in said passageway and provided with beveled ends resting in said sockets, a spring positioned in said passageway between said latches and normally forcing said latches outwardly, abutment blocks carried by said latches to limit their outward movement, a weight suspended from said body portion and positioned beneath said valve seat, and a plunger passing through said screen and resting upon said body portion whereby the placing of a cork in said bottle will push said valve inwardly and force said latches out of said sockets and into said grooves whereby said valve will normally rest upon said valve seat.

2. A bottle, a neck leading from said bot-

tle, a valve seat at the inner end of said neck and provided with a conical inner face, said neck being provided with grooves leading from said valve seat and with sockets above said grooves, a perforated partition embedded in said neck adjacent its outer end, a valve comprising a body portion, the body portion provided with aligned openings in its sides, plates embedded in said body portion above and below said openings and forming a housing in said body portion, latches passing through said openings into said housing and having their outer ends seated in said sockets, abutment blocks carried by the inner end portions of said latches, a spring positioned between said latches and normally forcing said latches outwardly, a perforated weight positioned within said bottle beneath said valve seat, a flexible connection suspending said weight from said body portion, and a plunger passing through said partition and resting upon said body portion, whereby said body portion may be forced inwardly to move said latches out of said socket and into said grooves to slidably mount said valve in said neck.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

BERT G. VOSBURGH.

Witnesses:

MARY VOSBURGH,

CLAYTON H. VOSBURGH.