

(No Model.)

G. W. ROBERTS.
ANTIREFILLING BOTTLE.

No. 581,618.

Patented Apr. 27, 1897.

Fig. 1.

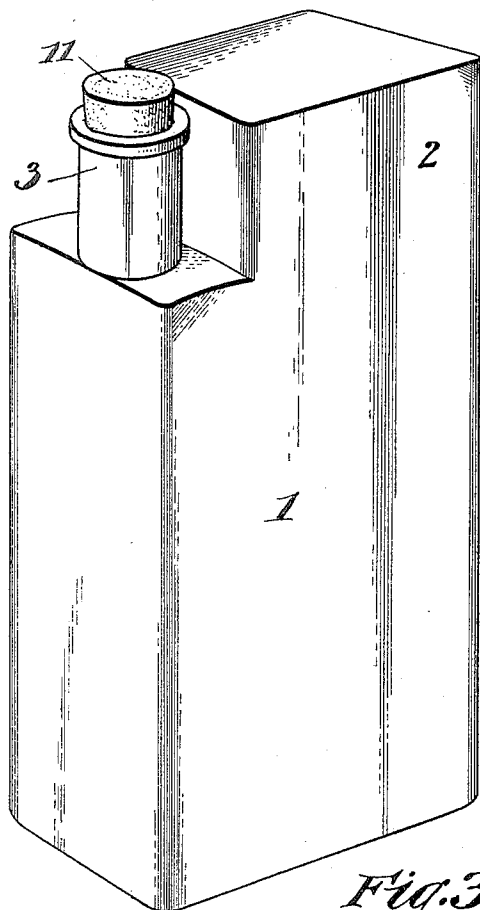


Fig. 2.

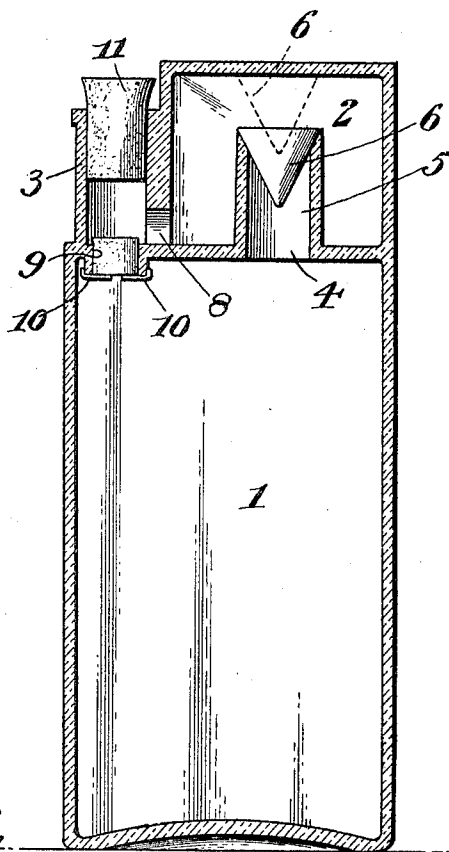
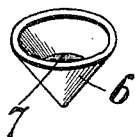


Fig. 3.



Witnesses

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By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

GEORGE W. ROBERTS, OF WEST SUPERIOR, WISCONSIN.

ANTIREFILLING BOTTLE.

SPECIFICATION forming part of Letters Patent No. 581,618, dated April 27, 1897.

Application filed January 27, 1896. Serial No. 577,029. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. ROBERTS, a citizen of the United States, residing at West Superior, in the county of Douglas and State of Wisconsin, have invented a new and useful Antirefilling Bottle, of which the following is a specification.

This invention relates to an improvement in bottles for containing medicine or other liquids; and the object of the invention is to provide a novel form and construction of bottle whereby the fraudulent refilling of said bottle with a spurious preparation will be effectually prevented.

To this end the present invention consists in certain novel features and details of construction and arrangement, as hereinafter fully described, illustrated in the drawings, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of an improved bottle constructed in accordance with this invention. Fig. 2 is a vertical section taken centrally through the same, showing the particular construction of the several compartments, valve, &c. Fig. 3 is a detail perspective view of the weighted valve.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, 1 indicates the main body, which may be of any size and configuration according to the preference or desire of the manufacturer, the particular form of bottle illustrated in the drawings being substantially rectangular.

The material of which the bottle is composed is preferably glass, but it will be apparent that said bottle may be formed of any preferred or desired material.

In addition to the main liquid-containing body 1 of the bottle, the latter is provided at its upper end with a vertical extension forming a supplemental compartment 2, which is entirely inclosed with the exception only of two perforations, one leading from said compartment into the bottle proper and the other communicating with the vertical neck or spout 3.

The bottle is provided at the top of its body portion 1 with a horizontal diaphragm forming the bottom of the extension or supple-

mental compartment 2 and supporting the main neck or spout 3.

The perforation 4, through which the liquid passes from the bottle proper into the upper compartment 2, is surrounded by an upwardly-extending tubular collar or supplemental neck 5, formed integrally with the bottle in the process of manufacture, and said tubular collar or neck terminates a sufficient distance below the top wall of the supplemental compartment 2 to permit a conical valve 6, of metal, glass, or any desired material, to be placed therein. The valve 6 is partially filled with any weighty substance, as indicated at 7, for facilitating the proper seating of the valve in the upper end of the tubular collar 5. The height of the valve 6 and the space between the upper end of the neck 5 and the interior face of the upper wall of the supplemental compartment 2 are so regulated that when the device as a whole is inverted the valve will be unseated by its own weight and the pressure of the liquid contained in the bottle thereon, while at the same time the escape of the valve from the mouth of the collar or neck 5 will be impossible by reason of the pointed end of the valve lying always within the mouth of the neck 5.

Another perforation 8 affords communication between the compartment 2 and the spout 3, in order that the liquid which has passed into the compartment 2 may be conducted into the spout and poured off therefrom. At the base of the spout 3 is an aperture 9, leading into the main body of the bottle, by means of which the bottle is originally filled. After the bottle has been filled a suitable cork or stopper of glass or any preferred or desired material is inserted into the aperture 9 and is prevented from escaping therefrom by means of one or more spring-catches secured, preferably, to the bottom of the cork or stopper, as shown at 10, said spring-catches being arranged to engage beneath the aperture 9 when the cork or stopper is forced down sufficiently. By this construction it will be impossible to withdraw the cork or stopper without breaking and destroying the bottle, thereby effectively preventing the fraudulent refilling of said bottle. The spout 3 is also provided with the usual cork or stopper 11.

In operation the bottle is inverted in the

usual manner, when by reason of the weight of the valve 6 and the pressure thereon of the liquid contained in the bottle said valve is unseated, as hereinabove described, allowing
5 the liquid to pass into the compartment 2 and thence through the communicating aperture into the spout or neck 3, from which it is poured off. It will be apparent that when the bottle is again set upright, with a view to re-
10 filling it after it has once been emptied, the valve will be reseated by gravity, thereby effectually shutting off the inflow of liquid to the interior of the bottle.

The construction described is very simple
15 and will be found valuable and efficient for preventing the fraudulent refilling of the bottle with spurious preparations. It will also be apparent that various changes in the form, proportion, and the minor details of construction may be resorted to without departing
20 from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured
25 by Letters Patent, is—

An antirefilling bottle comprising a body provided at its top with a horizontal diaphragm having a perforation 4 and an aper-

ture 9, an extension 2 of less area than the diaphragm projecting vertically therefrom, com- 30
posed of a top and sides and having an opening 8 at one of its sides, a vertically-disposed supplemental neck 5 arranged within the extension 2, rising from the diaphragm at the
35 perforation 4 and terminating short of the top of the extension 2, the upper edges of the supplemental neck forming a valve-seat, a valve arranged on the valve-seat and interposed between the supplemental neck and the top of
40 the extension 2, a vertically-disposed main neck rising from the diaphragm at the opening 9, located outside of the extension 2 and communicating with the same through the
45 opening 8, upper and lower corks arranged at the top and bottom of the main neck and located above and below the opening 8, and spring-catches arranged at the aperture 9 and engaging the bottom of the lower stopper or
cork, substantially as described.

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

GEORGE W. ROBERTS.

Witnesses:

H. W. NICHOLS,

D. CLOUGH GATES.